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ORIGINAL ARTICLES.

CLINICAL LESSONS.

Pseudocyesis—Spurious Pregnancy.

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I HAD hoped to show you to-day a case which is of unusual interest and of the utmost rarity. The patient will, I think, come hither sooner or later, because she is convinced I am wrong as to her state, and because Professor Hirst, whom I shall ask to see her, will agree with her and disagree with me. Moreover, she is hysterical and inclined to exhibit herself. I shall not wait for her return, as it may never happen, but take her case as a text or an excuse for dwelling on a subject of interest to both the obstetrician and the neurologist.

I find it somewhat hard to fit her case and others like it with a label. If I call it simulation of pregnancy, that would be near to a satisfactory name; it would not fully satisfy me. As usual, I should have to qualify and explain it. Perhaps it were well to leave the matter until I have stated some illustrative examples. Before doing so I shall give an outline, so to speak, a delineation of the interesting condition for which I wish to claim your attention.

A woman, young, or else it may be at or past the climacteric, eagerly desires a child, or is horribly afraid of becoming pregnant. The menses become slight in amount, irregular, and at last cease or not. Meanwhile the abdomen and breasts enlarge owing to rapid taking on of fat, and this is far less visible elsewhere. There comes with this excess of fat the most profound conviction of the fact of pregnancy. By and by the child is felt, the physician takes it for granted, and this goes on until the great diagnostician, Time, corrects the delusion. Then the fat disappears with remarkable speed and the reign of this singular simulation is at an end. When I describe one or two of these cases you will, I fancy, agree with me that the subject is worth discussing.

Perhaps the cases may be more common than I think they are. As a consultant I might rarely hear of them. The general physician and the obstetrician are more liable to encounter them, and yet they must be uncommon. Some years ago I

asked Dr. Duer if he recalled the two or three cases of this nature sent to him by me. He said yes, and that he had also met with one or two others. Shortly after this I was consulted by a lady in regard to a woman of thirty years of age, a nurse in whom she was interested. This person had been married some three years to a very old man possessed of a considerable estate. He died, leaving his wife her legal share and the rest to distant cousins, unless the wife had a child. For two months before he died the woman, who was very anemic, ceased to menstruate. She became sure that she was pregnant, and thereupon took on flesh at a rate and in a way which seemed to justify her belief. Her breasts and abdomen were the chief seats of this overgrowth. The menses did not return, her pallor increased; the child was felt, and every preparation made for delivery. At the eighth month a physician made an examination and assured her of the absence of pregnancy. A second medical opinion confirmed the first, and the tenth month found her of immense size and still positive as to her condition. At the twelfth month her menstrual flow returned, and she became sure it was the early signal of labor. When it passed over she became convinced of her error, and at once dropped weight at the rate of half a pound a day despite every effort to limit the rate of this remarkable loss. At the end of two months she had parted with fifty pounds and was on the whole less anemic. At this stage I was consulted by letter, as the woman had become exceedingly hysterical. This briefly stated case, which occurred many years ago, is a fair illustration of my thesis.

Another instance I saw when in general practice. A lady who had several children and suffered much in her pregnancies, passed five years without becoming impregnated. Then she missed a period, and had as usual vomiting. She made some wild efforts to end her supposed pregnancy, and failing, accepted her fate. The menses returned at the ninth month, and were presumed to mean labor. Meanwhile she vomited up to the eighth month and ate little. Nevertheless she took on fat so as to make the abdomen and breasts immense and to excite unusual attention.

No physician examined her until the supposed labor began, when, of course, the truth came out. She was pleased not to have another child, and in her case, as in all the others known to me, the fat lessened as soon as the mind was satisfied as to the

non-existence of pregnancy. As I now recall the facts, this woman was not more than two months in getting rid of the excess of adipose tissue.

Dr. Hirst tells me he has met with cases of women taking on fat with cessation of the menses, and in which there was also a steady belief in the existence of pregnancy. He has not so followed up these cases as to know if in them the fat fell away with speed when once the patient was assured that no child existed within her. My much regretted friend Goodell promised me the detailed account of at least two examples having precisely the sequence of symptoms I have described.

These women are in no sense of unsound mind, nor is their illusion to be classified with the delusory and obstinate belief as to their pregnancy held by some of the insane. These latter persons may be virgins or not. Sometimes the idea has arisen in connection with uterine symptoms, or else is the outcome of some exposure to the creation of pregnancy and alarm at a possible but non-existent pregnancy. Many of these people hold to the notion for years. Dr. Hirst recalls to me the story of Dupuytren, who, when consulted for such a case of eighteen years' duration, advised the woman to swallow a private tutor. It is said to have cured the case, which I much doubt. I knew of one instance in which a physician etherized such a case, and assured the woman he had taken away a dead child. This answered for a week, and then she confided to him her regret that he had not taken away the other, as now she knew they were twins.

The delusion of pregnancy in the insane is neither created nor kept up of need by excess of flesh or failure of menstruation. No such food for fancy is needed. It defies the contradictions of time and the popular knowledge of physiology.

The illusion of the patients I describe is inevitably destroyed by time and adverse circumstance.

I can find no mention anywhere in literature of cases like those I have described. Perhaps I may have overlooked them or they might be found on more careful search. Yet, after inquiry of men with the large experience of Goodell and Duer, I am forced to believe them exceptionally rare.

A woman who is emotionally eager to have or not to have a child: one with the unsatisfied craving for motherhood, or one who has been fearfully tormented in her pregnancies—these, I think, are the classes of women liable to this complex group of symptoms. More rarely it is a woman long childless, who somewhat early and suddenly ceases to flow, and, as is not rare at the climacteric, puts on flesh very rapidly. The illusion of pregnancy is in such females a flattering one.

The other cases are the more interesting. The

woman has naturally and too constantly dwelt, with disappointed hope or abiding fear, on the loss or delay of the periodic bleeding. Then she becomes more gladly sure or more alarmed, as the case may be, as she gains flesh and especially abdominal fat. Is this gain in flesh an accident of nutrition which combines, with lessened or absent menstruation, to give and sustain her growing illusion as to pregnancy? Women, as I long ago remarked in my book on *Rest Treatment*, are easier to fatten than men; also in them gain or loss of adipose tissue is more common than in the other sex, and less significant as to health or of pathologic disaster. The point as to which I remain in doubt is as to whether belief in the presence of the pregnant condition in any way influences the really singular gain in fat seen in certain of these cases. Whether it is, as I said, coincident and assistant of belief, or whether it follows that mental state, I do not know. Some women thus deluded are, when once assured of pregnancy, likely to be careful to exercise less than usual, and acquire, like some pregnant women, excessive appetites. Also it is quite sure that once they are convinced of their delusion they lose flesh very speedily, and this, too, may be in a measure due to a return to normal habits. Still there remains for us the unsolved problem of how much the mind has to do with the gain and loss of weight. The first of these cases I ever saw was brought to my knowledge in a singular way: A woman had given birth to two female children. Some years passed, and her desire for a boy was ungratified. Then she missed her flow once, and had thrice after this, as always took place with her when pregnant, a very small but regular loss. At the second month morning vomiting came on as usual with her. Meanwhile she became very fat, and as the growth was largely, in fact excessively, abdominal, she became easily sure of her condition. She was not my patient, but her husband consulted me as to his own morning sickness, which came on with the first occurrence of this sign in his wife, as had been the case twice before in her former pregnancies. I advised him to leave home, and this proved effectual. I learned later that the woman continued to gain flesh and be sick every morning until the seventh month. Then menstruation returned, an examination was made, and when sure that there was no possibility of her being pregnant she began to lose flesh, and within a few months regained her usual size.

The sympathetic vomiting of the husband is an interesting subject to which I called attention some years ago in my lectures on nervous maladies.

Dr. John W. Coles, a retired surgeon of the United States Navy, died at Philadelphia on April 6th, at the age of fifty-seven years.

ACCENTUATION OF THE PULMONARY SECOND SOUND AN IMPORTANT SIGN IN THE DIAGNOSIS OF PERICARDITIS.¹

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DURING the past two years the attention of Dr. Dock and myself has been frequently called to the importance of a certain physical sign in the diagnosis of pericarditis that has not received due consideration. Having met with a large number of puzzling heart-cases, in which the chief physical sign was a marked accentuation of the pulmonary second sound, either with or without the coexistence of peculiar murmurs at the base or apex of the heart, and with the entire absence of any other condition in heart or lungs to account for this accentuation, we have taken especial pains to note its occurrence and to seek some explanation. Fortunately, we were able to follow some of these cases through the development of certain phases that left no doubt as to the diagnosis; and, from the clinical experience thus gained we have been able to widen to a valuable degree our diagnostic horizon. A brief citation of a few of the cases presenting this sign may serve to show its importance and to emphasize its significance in the diagnosis of pericarditis, especially in the first stages of the disease.

CASE I.—Mr. A. G. W., a student, aged twenty-four years, came to the hospital on March 24, 1894, complaining of palpitation, a feeling of constriction in the chest, and shortness of breath when attempting to sing. In addition to these symptoms he had also a slight, dry cough. Three weeks before he had had slight rheumatic pains in the knees. The examination of the lungs was entirely negative. The apex-beat was of moderate strength, and was located in the fifth intercostal space, just outside the nipple-line. A faint presystolic thrill could be felt just inside of the apex-beat. The heart-dulness began at the fourth rib, extended a little to the left of the left parasternal line, and to the right as far as the median line. On auscultation a slightly rough blowing murmur, presystolic in time, was heard best just inside of the apex-beat, where the thrill was felt. The first sound at the apex was strongly accentuated, and with it there was a soft blowing murmur of slight intensity. These murmurs were constant, and had all the characteristics of valvular murmurs. The first sound at the base of the heart was very clear and strong. No murmurs could be heard at the base. The second sound was everywhere unusually strong, but in the left second interspace its character was such as to attract immediate attention. Strongly accentuated, it gave a peculiarly clangorous shock. The heart-rhythm was slightly irregular, and the radial pulse was 80, slightly irregular, small, quick, and of low tension. A diagnosis of

mitral stenosis and insufficiency was made. The next day the systolic murmur could not be heard; the other signs were as before. Comment was made at this time upon the rough character of the presystolic murmur and upon the accentuation of the pulmonary second sound, and the correctness of the diagnosis was questioned.

On March 26th the man was again examined. The physical signs were unchanged; the murmur was not altered in character by pressure with the stethoscope. On the next day the patient was again seen. Everywhere, especially at the base, there were heard two loud friction-sounds, forming with the accentuated second sound a marked canter-rhythm, one murmur occupying the systole and replacing the first sound; the second, of rougher quality, coming after the second sound. These murmurs displayed friction fremitus; were superficial; not transmitted beyond the heart-area; were increased by pressure; affected by respiration; influenced by change of position, and were not constant. The patient complained of dyspnea, dry cough, and precordial pain. At the time of examination his temperature was 102°. On March 28th he was seen in his room. There was no change, either in the symptoms or in the physical signs. On the following day he complained much of pain in the heart-region, but no change in the signs could be discovered. To relieve the pain a mustard-plaster was applied to the heart-area. The patient let this remain until a large blister had formed; but in the twenty-four hours following its application a large effusion took place, as shown by the following signs: dulness extended, in the shape of a large triangle, from the apex at the second rib in the left sternal line down to the sixth rib, two finger-breadths to the outside of the left nipple-line, and across the sternum to the fifth intercostal space a finger's breadth to the right of the sternum. The apex-beat was in the fifth intercostal space, in the nipple-line. A small triangle of dulness, over which vocal fremitus and breath-sounds were absent, extended two finger-breadths beyond the apex-beat. The heart-sounds were distant and very faint, with the exception of the pulmonary second, which still retained its accentuated character. Friction-sounds were absent, except at the base of the heart.

From March 31st to April 7th the man's condition rapidly improved under the treatment, which consisted of the use of salicylic acid internally and of the ice-bag locally. The area of dulness decreased; friction-sounds disappeared; the heart-sounds became strong and clear. The accentuation of the second sound in the left second interspace still remained, and was the most striking sign. Repeated thorough examinations of the lungs were entirely negative. The patient remained under observation until he had made a complete recovery. The heart-dulness became normal; all murmurs and friction-sounds disappeared; the accentuation of the pulmonary sound remained for some time, but finally the sound became normal.

CASE II.—Mr. A. C., a student, aged twenty-two years, was seen in November, 1893. He complained of sore-throat, pain in the joints, headache, and palpi-

¹ From the Clinic of Internal Medicine, University of Michigan, Ann Arbor.

tation. The tonsils were enlarged and inflamed, showing numerous small points of white exudate. The temperature ranged from 102° to 104° . The physical examination of all the organs was entirely negative, with the exception of the heart. All of the sounds were increased, but especially was the pulmonary second sound accentuated, and strikingly ringing and metallic in quality. No murmurs or friction could be heard after careful examination. The heart-action was not greatly increased, but was irregular in rhythm. There was no enlargement of the heart-dulness. Because of the accentuation of the pulmonary sound without other signs, special attention was paid to the heart-examination. At one visit slight friction was heard in the pulmonary area, but it disappeared, and did not return. The patient recovered without other incident; but when last seen the accentuated character of the pulmonary sound was still marked.

During the year following the man had two other attacks resembling this one, but was seen by other physicians, who treated him for "febricula." In the latter part of December, 1894, he was again taken ill with similar symptoms, and was seen on the first day by Dr. Dock, who found nothing abnormal in the heart-examination. The case then passed into other hands; and finally, because of continued fever, malaise, etc., was sent to the hospital as a suspected case of typhoid. He had also complained of pain under the sternum. When I first saw him he had no fever; the heart was slow and irregular; all of the sounds were prolonged and strongly accentuated, the pulmonary second having the same marked ringing character as when first seen a year before; it was also markedly divided, and, in addition, there were heard all over the heart, especially at the base, friction-sounds of moderate intensity. The heart-dulness was enlarged to the right, extending a finger's breadth to the right of the sternal line. The apex-beat was doubled, the second impulse being less strong than the first. The patient remained under observation for some days, during which time he had no fever; the heart-dulness became normal; the friction and the accentuation of the heart-sounds became much less marked, but were still present. Many careful examinations of the lungs were negative. As all symptoms had disappeared, the patient thought that he had entirely recovered, and so left the hospital. Though advised to return for further examination, he has not reported since his discharge.

CASE III.—Mr. R. E., a student, aged twenty-eight years, came to the hospital for an examination of his heart. For a month he had been troubled with frequent attacks of palpitation and marked irregularity of the heart's action, without other symptoms. The examination of the lungs was entirely negative. The apex-beat was very strong, but in normal position. No thrill could be felt. The area of heart-dulness was not enlarged. The heart-sounds were everywhere loud and roughened, especially in the pulmonary area, where the second sound was clangorous in quality, producing a very marked shock. Here also, after slight exertion, double friction-sounds were audible, but were heard sometimes when the

heart's action was quiet. The heart-rhythm was quite irregular. Several days after this he was seen again; the heart was slower and more regular; the first sound in the pulmonary area was murmurish; but the second was still strongly accentuated. There was also fine friction at the end of the systole, and sometimes in both systole and diastole. This was heard best in the third intercostal space near the left edge of the sternum. It continued when the patient suspended respiration, but sometimes disappeared altogether. The man was seen at short intervals for a month. The friction and accentuation of the pulmonary second sound entirely disappeared, but after violent exercise a soft systolic murmur was heard at the base, the heart-rhythm becoming irregular. There was no return of the symptoms, and when last seen the heart-sounds were normal.

CASE IV.—Mr. A. W., student, aged nineteen years, passed his physical examination in the gymnasium, but it was noted that his heart's action was greatly increased, and that the pulmonary sound was "peculiar." He was told then that his heart was not normal, and that he should report once a month for examination. Becoming somewhat alarmed, he came to the hospital for an examination. He had no subjective symptoms except shortness of breath when attempting to sing. The physical examination, with the exception of that of the heart, was entirely negative. There was a strong apex-beat in the normal location, but no thrill was felt. The heart-dulness was not enlarged. Everywhere, especially at the base, there was pericardial friction. The first sound was murmurish all over, especially in the left second interspace. Here also the second sound was loudly ringing in character, causing a shock that could be felt plainly by the hand. The aortic sound was also increased, but much less intense than the pulmonary, and of entirely different quality. The next examination was made several days later. At this time there was no friction; the first sound in the pulmonary area was very murmurish, and the second still accentuated; otherwise the heart-sounds were normal. Two days afterward he was seen again. There was pericardial friction all over, the loudest and roughest sound occurring just before the strongly accentuated pulmonary sound. The first sound at the base was replaced by a soft, blowing murmur distinct from friction-sounds. For a month after this the man was examined at very short intervals. The friction-sounds varied greatly, often being entirely absent; the pulmonary accentuation and irregularity of rhythm were constant. The soft systolic murmur at the base was thought to be an anemic murmur. Nearly two months after these signs were first noted there were the physical signs of a moderate effusion. This disappeared in a short time, and since then no friction has been heard; the accentuation of the pulmonary sound is much less marked, and the heart is more regular. The patient is still kept under observation.

CASE V.—Mr. J. Q., a laborer, aged twenty-seven years, was admitted for treatment of chronic gastritis. He had no symptoms referable to heart or lungs. When examined a strongly marked accentuation of the pulmonary sound was found, with a

murmurish first sound at the base. The second sound was also everywhere divided, the division being more marked in the pulmonary region than elsewhere. Though the aortic sound, as heard over the remainder of the heart's area, was unusually loud, it did not have the clangorous quality of the pulmonary sound. The murmurish character of the first sound disappeared when the patient assumed the erect position. No friction-sounds could be heard anywhere; the heart-dulness was not enlarged, and the rhythm was regular. From the strong accentuation of the pulmonary sound, unexplained by the existence of any other condition in heart or lungs, the suspicion of pericarditis was entertained, and the patient was advised to remain for further observation.

When examined the next day, a loud, blowing murmur was heard at the base. It resembled a valvular murmur, was transmitted upward and to the right. This was thought by one of the staff, who saw the patient for the first time, to be an aortic murmur. The second sounds were as before. Two days afterward a peculiar shuffling-sound of slight intensity was heard in the pulmonary area, on pressure becoming rough and friction-like in character. For several days after this typical friction-sounds were heard at different intervals; but often they were absent, and the only sign present was the pulmonary accentuation. After being under observation for two weeks, without other signs or symptoms, the temperature suddenly rose to 102° or 103° , and there was marked friction all over the heart-area, with increase of heart-dulness, extending beyond the apex-beat. The pulmonary second sound retained its clangorous character. Under the salicylic-acid treatment, which we have used so largely in this condition and in pleurisy with effusion, the signs of effusion quickly disappeared; but the man still has peculiar shuffling-sounds at the base of heart, with a divided and ringing second sound in the left second interspace. For this reason he is still kept under observation.

Without going further into the detail of these cases, it will be seen that all five presented as a striking and persistent sign a very marked change in the character of the second sound as heard in the left second interspace near the sternum, a change that was not shared in by the aortic second to anything like the same degree. This change could not be explained by any condition other than the pericarditis. It began early, either with the symptoms or preceding them, and, continuing through the course of the disease, disappeared finally only after all other signs and symptoms had ceased. So far as I can remember, the sign was present in all of numerous cases of the disease that I saw in Vienna, and Dr. Dock remembers it as a prominent sign in his experience with this affection. A thorough search of the literature of pericarditis as afforded by the University library did not give much evidence as to observations made of the occurrence of this sign;

and the reports of cases are almost barren so far as changes in the character of the heart-sounds are concerned. As the majority of cases reported are those in which effusion has taken place, the chief notice taken of the heart-sounds has been in regard to their weakness, and in only few of the cases without effusion is there a mention of an accentuation of this sound. I have also been unable to find any mention of this sign in any of the special works on the heart and its diseases, and it does not find a place in the articles on pericarditis in any of the recent text-books. The French seem to have made an especial study of this disease, but many of their works in this line I have been unable to examine. So far as I have been able to find, the only notice taken of the diagnostic value of this sign is in the report of the French Congress of Internal Medicine, held in Lyons last October.

Under the head of "Les Signes de la Péricardite Aiguë," M. Josseland, of Lyons, makes this statement, which I translate entire (*La Semaine Médicale*, November 3, 1894):

In pericarditis the friction-sound is often not heard until some time after the pathologic change has begun, and Stokes asserted that it did not exist in the early stages of the disease. Nevertheless, in my opinion, there is an early sign of true value.

When, in the course of an acute articular rheumatism, one auscultates comparatively the base of the heart in the aortic and pulmonary areas, it will sometimes happen that the second sound in the latter place will be found to be much more intense, more ringing, almost clangorous, the inverse condition of that found in chronic aortitis, when the second sound is more exaggerated to the right of the sternum than to the left. Many times this same difference is appreciable to the hand, as on palpation an exaggerated diastolic shock may be felt in the pulmonary area. The presence of this sign should lead one to search very carefully for friction-sounds, which may often be discovered when a superficial examination would have been negative; if not found, their appearance may be predicted within an interval of time of greater or less length. This accentuation of the pulmonary sound occurs early, and is very often transitory; it precedes the appearance of the friction by from one to three days. With some exceptions this accentuation disappears rather quickly, and is replaced by the friction-sound. It is a sign belonging to the initial congestive period, like the crepitant râle in pneumonia. The friction-sound, on the contrary, lasts through the period of the fever, and may be heard many weeks after the defervescence.

The pathogenesis of the accentuated sound is most probably the following: In acute pericarditis the friction-sound is most commonly heard along the left border of the sternum and in the pulmonary area. It is probable that the subjacent heart-muscle, which is near the infundibulum of the pulmonary artery, is, itself, congested and turgescient, and that

this part of the myocardium, densified and covered over with a deposit of fibrin, increases the sound of the pulmonary valves, which are in close proximity. For example, there is likewise in pleurisy a slight degree of pulmonary congestion, which transmits the sounds arising in the glottis more or less modified into bronchial breathing and egophony. So there is in pericarditis a certain amount of cardiac congestion which transmits to the ear and to the hand the amplified sound of the pulmonary valves.

This sign has great importance with reference both to diagnosis and to treatment. In doubtful cases, when one hesitates between a friction-sound on the one hand and an anemic or extra-cardial murmur on the other, it enables one to decide in favor of the friction. Moreover, this sign may be of interest not only in pericarditis; endo-pericarditis is not rare. This diastolic accentuation indicates, therefore, that the heart is affected, the localization and intensity of the condition being with difficulty made precise; and that there should be instituted early a revulsive medication, without waiting further for the later signs of murmur and friction-sounds.

While our experience would lead us to confirm M. Jossierand's statements in regard to this sign, it will also permit us to add to his observations and to emphasize his conclusions in regard to its importance. It is highly probable that simple pericarditis, occurring without connection with rheumatism or other disease, is of much more frequent occurrence than is ordinarily supposed. Post-mortem statistics show this plainly. The absence of striking symptoms, the too-frequently rare and hasty examinations of the heart, make it especially liable to escape recognition. As effusion may be long delayed or very slight, the presence of pericarditis may not be recognized from the slight signs and symptoms; and the patient may often be allowed to engage in pursuits of actual harm in adding strain to a heart already working at a disadvantage. Three of our patients while in this condition were permitted to do regular gymnasium-work, although exercise produced in each very disagreeable palpitation and shortness of breath. The recognition of the disease by this sign is therefore of the greatest importance to the patient, who may be guarded from exposure and injudicious acts, put upon suitable treatment, and carefully watched for the signs of effusion, which may come on at any time and prove to be a very serious affair. Many unexplained cases of palpitation and cardiac irregularity may possibly be made clear by recognition of this sign. Several years ago, before our attention was called to the significance of this pulmonary accentuation, we were occasionally puzzled by cases presenting these symptoms, and on physical examination exhibiting this accentuation in the pulmonary area, with peculiar and unexplained basal murmurs. It is now a question whether these were not cases of pericarditis.

This sign is certainly a very early one; but in our experience it is not transitory, being the very last thing to disappear. If the explanation of its cause as given by M. Jossierand is correct, and it certainly seems adequate to me, having arrived at the same conclusion before I saw his article, it must happen that a thickening of the pericardium around the pulmonary artery or a deposit of fibrin in the same region must amplify the sounds of the pulmonary valves so long as the condition exists; and this may be present for a long time after the active disease has subsided. It is conceivable then that this accentuation must exist in all cases except the very mildest, in which the pathologic changes take place in only a very slight degree. The intensity of the accentuation of the sound will depend therefore upon the degree and character of change in the muscle and pericardium, and upon the amount and character of the exudate, whereby there is an increased conductivity of the pulmonary sound in the space lying between the valves and the chest-wall. In adherent pericardium, and in adhesion of the pericardium to the pleura, we should expect to find a similar increase in the heart-sounds; and this was very striking in one case that I have seen.

The part of the pericardium surrounding the pulmonary artery seems to be, as M. Jossierand has indicated, a favorable spot for the development of the disease; and in looking over the reports of cases one is struck with the frequency with which it is localized in this area. As to the occurrence of this sign in every case of pericarditis, it is of course evident that it will not be found in those cases in which the disease is localized in some other part of the pericardium than at the base, or in those cases in which there is but little change in the region of the pulmonary artery. But in the great majority of cases the pulmonary pericardium is affected, and consequently this sign will be found to be present. It is true that all of the heart-sounds may be increased in some of the cases, but the fact that it is the pulmonary second which is especially affected is clearly shown by the sharp localization of this accentuation in the second interspace on the left, the frequent presence of a distinct shock in this region, and the complete difference in quality between it and the aortic sound as heard elsewhere over the heart-area.

The occurrence, therefore, of an accentuated second sound in the left second interspace that cannot be explained by any other condition in heart or lungs should always excite suspicion, especially if it is accompanied by murmurs resembling the so-called anemic murmurs, but without the presence of an anemic condition to account for them. The patient should be advised accordingly, and repeated and frequent examinations of the heart should be

made so long as the condition lasts. In rheumatism and all other diseases in which pericarditis may be a complication, the sign is of preëminent importance as giving early and definite warning of involvement of the heart. Moreover, by calling attention to the necessity of frequent examinations of the heart, the careful consideration of this sign may lead to the clearing up of many obscure and puzzling heart-cases. As it alone has been the constant sign in the cases of pericarditis that I have seen, the friction-sounds being often entirely absent, and many times so like valvular murmurs that it was impossible to differentiate them, I look upon it as one of the most striking and important signs of the disease, and beg leave to assert for it a prominent place in diagnosis.

THE TREATMENT OF CONJUNCTIVITIS NEONATORUM BY IRRIGATION WITH STERILIZED WATER.

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I DESIRE in reporting the following cases of conjunctivitis of the newborn, studied in a recent service in the maternity wards of the Philadelphia Lying-in Charity, to describe a method of treatment recommended both by its simplicity and by the results of its employment.

The five cases may be divided into two groups representing the manner of infection, those incident to direct or primary infection and those occurring secondarily by contact. Although the results of treatment were modified by the character of the infection, those cases due to secondary infection yielding more promptly, the usual duration of the disease was appreciably shortened by the method about to be described.

The gonococcus is persistent in its power of inoculation, and as long as the germ is present the blennorrhea will remain. The amount of inflammation also will depend upon the number of infecting elements present, and as they decrease in number the conjunctivitis decreases in intensity. The course and duration of the disease will depend, therefore, upon two factors: First, the intensity of the infection; second, the thoroughness with which the conjunctiva is cleansed of the attacking gonococcus. The treatment as usually pursued consists first in prophylaxis; second, the application of astringents; third, the use of antiseptic irrigation; fourth, of external applications in the form of hot and cold compresses. The prophylactic method is undoubtedly the best way of combating the disease, and is best carried out by careful antiseptic douching of the vagina prior to labor, and cleansing the conjunctiva as far as possible as soon as the head is born. This treatment, which should be followed in every case of labor whether the presence of specific

vaginitis be suspected or not, fulfils, in most cases coming under the care of the accoucheur, the requirements of prophylactic treatment. In Germany Credé's method—the instillation into the conjunctival sac of one or two drops of a 2 per cent. solution of silver nitrate—is resorted to as a prophylactic measure. Silver nitrate, in the proportion of 1 per cent., applied to the conjunctiva by a camel's-hair pencil, the excess being removed by a solution of sodium chlorid, represents the astringent method of treatment (Veasey, *MEDICAL NEWS*, vol. xlv, No. 8). The application should be made at longer intervals, namely, once in twenty-four hours, and should be continued during the suppurative stage. The saturated solution of boric acid, mercuric chlorid, 1:6000, and the solution of potassium permanganate of the same strength as the latter are the common antiseptic solutions used.

In the cases I report the form of treatment was that in which sterilized water by irrigation was used purely for its detergent effect. I have submitted the ordinary house-reports from the record of each case to illustrate the histories and results of treatment.

CASE I.—Infant of M. McA., was born on October 17, 1894. The record of pregnancy gives no facts pertaining to the infection. As to the labor, there was complete dilatation with rupture of the membranes forty-five minutes before expulsion of the head (see the relation of the second stage of labor to the occurrence of ante-partum ophthalmia as described by Friedenwald, *MEDICAL NEWS*, vol. lxvi, No. 10). The internal examination on the eighteenth day revealed no evidence of chronic gonorrhea (vegetations on the anterior vaginal wall). The conjunctivitis developed on the fourteenth day. The first secretion was marked by hemorrhagic discharge. The left eye was affected as a result of contact, there being another case of the disease in the ward. Irrigation with sterilized water was ordered for twenty minutes out of every hour. On the fourth day improvement was noted; there were patches of congestion and plaques of lymph on the palpebral conjunctiva.

CASE II.—Infant of A. L., was born on November 7th. The record of the pregnancy was negative as to infection. The dilatation was succeeded in one hour and a half by rupture of the membranes, and in two hours and forty minutes by expulsion of the child. The weight of the child was five-and-a-half pounds. The woman was anemic, and she was placed on pil. ferri carbonat., gr. iij, four times daily, with improvement in the general condition at the date of discharge. Conjunctivitis developed on the second day in the child, in conjunction with icterus; the serous secretion was of a deep-yellow color. Irrigation with sterilized water was ordered twenty minutes out of every hour, together with oil-inunctions. At the date of discharge improvement was noted corresponding to the improvement in the mother's condition as a result of

treatment. Mother and child were discharged on the seventeenth day after confinement.

CASE III.—Infant of M. J., was born December 1st. There was no specific history, according to the statement of the gravida, although her husband had led an irregular life, and there was no history of leukorrhea. As to the labor, there was complete dilatation, followed in twenty minutes by rupture of the membranes, and in thirty minutes by the expulsion of the child. The woman was pallid and neurotic, and was placed on Fowler's solution, gtt. iv, three times daily. At the date of discharge her general condition was improved. Conjunctivitis developed in the child on the eighth day, with early signs of swelling and mucous discharge; both eyes were affected. The treatment was with boric acid and cold compresses during the first half-day, and was changed to irrigation with sterilized water for fifteen minutes out of every hour, followed by marked improvement on the second day; the swelling and secretion disappeared. On December 15th (the fifth day from the date of infection) there was no secretion, and the swelling was much reduced.

CASE IV.—Infant of A. McN., was born January 6, 1895. The record of pregnancy shows no history of antecedent gonorrhea, although the subsequent course of the case points to the suspicion of its presence. The duration of the second stage of labor was one hour, marked by the simultaneous dilatation of the cervix and rupture of membranes. The puerperium was normal. Mild ophthalmia developed in the child on the tenth day. The infection was from contact. The treatment was by irrigation with sterilized water for five minutes in every half-hour. On January 22d (the sixth day from the date of infection) the eye was well. The child developed dactylitis and also snuffles.

CASE V.—Infant of Mrs. E., was born January 10th. There were during the pregnancy strangury and frequent micturition, irrespective of pressure. The gravida presented a history of three successive vulvo-vaginal abscesses previous to the time of her present pregnancy. Dilatation was completed eight hours after rupture of the membranes. The duration of the second stage was fifty minutes. The puerperium was normal. Conjunctivitis developed rapidly in the child on the fifth day, with acute swelling and the early appearance of purulent discharge; there was a decrease of swelling, discharge, and hyperemia on the second day after infection. Treatment was by irrigation with sterilized water five minutes out of every half-hour. On January 18th the second eye was affected, but less acutely than the first. The eyes were in good condition on the twelfth day following infection.

In reviewing these cases the following points of interest present themselves:

1. The beneficial effect of general tonic treatment of the mother during the early period of lactation, as noted in Cases I and II.

2. The efficacy of irrigation in reducing the acute inflammatory symptoms incident to the early stage

of the infection, and the consequent decrease in the duration of the disease.

3. The occurrence of the rupture of the membranes in every case but one, Case V, as indicating subpartum, rather than antepartum, infection.

4. The fact that in each case the vertex presented and that labor progressed with a rapid second stage.

5. Although the diagnosis was in no case confirmed by bacteriologic examination or by the appearance of gonorrheal plaques on the hard palate, the specific source of the disease was apparent in cases in which a history of gonorrhea was not present, from the spread of the infection from contact.

6. The occurrence of frequent examinations during the second stage of labor, after rupture of the membranes, on account of the instruction to students present at each case, and the consequent greater risk of infection while the head was still within the lower uterine segment and before its passage through the cervix, considering that the chance of infection is progressively less according to the proximity of the infected area of the birth-canal to the vulvar outlet.

7. The subsidence of acute inflammatory symptoms and the cessation of the discharge (excepting in Case II, in which improvement was noted without a clear statement as to the presence of discharge) within something over eight days as an average, the shortest duration of any one case being five days.

8. The exclusion of astringents and antiseptics as adjuncts to the treatment, excepting in Case III, in which boric acid was used during the early stage of the conjunctivitis with comparatively no beneficial effect.

The treatment is conducted as follows: The infant, turned upon its side, is held upon the nurse's lap, the clothing of the nurse and child being protected by rubber cloth. The water, contained in a two-quart glass irrigating-vessel at a height of four feet above the child's head, is injected by means of a glass nozzle attached to the irrigating-tube, the caliber of which is three millimeters in diameter. The lids are separated so as to allow the stream of sterilized water, at a temperature of 99°, to irrigate thoroughly the surface of the conjunctival sac. The treatment is most effective when the irrigation is continued for five minutes out of every half-hour for the first twelve or eighteen hours, and decreased in frequency according to the decrease in symptoms. The infected eye is held downward toward the nurse's lap so as to prevent the infection of the other eye by contact with the irrigating fluid. By this treatment during the first stage of the disease the mucous discharge is removed and the congestion relieved; during the later stages the shreds of lymph and purulent discharge are removed and the granulating surface of the conjunctiva stimulated. The advantages on the side of isolation are evident,

as only the rubber coverings come in direct contact with the secretion from the eyes after the child is in position, and there is much less likelihood, under proper precautions, of spreading the infection than when eye-droppers and compresses are used. Usually the infants make very little effort at resistance, and frequently submit to the treatment without signs of discomfort.

CLINICAL MEMORANDA.

SUCCESSFUL REMOVAL OF A LARGE TUMOR OF THE MESENTERY, WITH RESECTION OF 43 INCHES OF INTESTINE; END-TO-END ANASTOMOSIS WITH MURPHY BUTTON.

BY F. CAUTHORN, A.M., M.D.,
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VISITING SURGEON TO PORTLAND HOSPITAL;
SURGEON N. P. R. R. CO.

M. P. T., aged forty-nine years, a farmer, was brought to Portland Hospital, January 16, 1895, for operation, by Dr. G. W. Maston, of Albany, with whom I saw him in consultation. Dr. Maston had noticed for about three years the presence of a hard tumor in the abdomen, which had grown more rapidly in the last three months, until it was now approximately the size of a double fist. A diagnosis of solid tumor, probably malignant, of the mesentery was made, and an exploratory operation was agreed upon and was performed the next day, January 17, 1895. Dr. Maston made the opening into the abdomen and exposed the tumor, which could be lifted out of the abdominal wound. A careful examination revealed the intimate attachment to the tumor of a large extent of intestine. After consultation as to the feasibility of removal I proposed to Dr. Maston the resection of the intestine involved in the tumor. To this the doctor gave his consent and asked me to execute the operation, which was done with his assistance. The tumor was located in the mesentery and had encroached upon the intestine until the mesentery upon this side of the tumor had been completely obliterated. Fortunately there was free mesentery between the tumor and the posterior mesenteric attachment. The tumor was approximately seven inches in diameter in its greatest breadth and four to five inches in its least, and of almost cartilaginous hardness. The amount of mesentery involved at its base was between six and seven inches.

The details of the operation are perhaps non-essential, except in one or two particulars, and I will confine my report to these. The two points of most importance were to cut the gut where its blood-supply would not be interrupted by the extensive section of the mesentery, and to handle this extent of mesentery without excessive hemorrhage. By lifting the tumor up, and thus putting the mesentery on the stretch against the light background of a window opposite, it was rendered semi-translucent, and the bloodvessels (principally the veins, I believe) could be quite readily discerned in their course through it and from the gut. A point was selected on each side of the tumor which this blood-supply seemed to reach, passing clear of the tumor, and was marked by

passing a heavy silk ligature around the gut at this point. These ligatures were tied loosely, merely to close the caliber of the gut and to facilitate handling the ends. The gut was then cut with scissors at these points and the mesentery torn downward until clear of the base of the tumor. I can recommend this maneuver, because the tear will follow the general radiations of the mesentery, and starting right I can hardly conceive that any vessel of any importance can be torn across. With the mesentery still upon the stretch, it was cut for perhaps three-fourths of its extent across the base by successive half-inch snips of the scissors, without any hemorrhage worth mentioning. The balance of it was then ligated *en masse* with two heavy silk ligatures. The bleeding was thus effectually prevented and did not exceed one-and-one-half ounces in the whole operation. The mesentery was stitched together with a continuous catgut suture after the usual method, and the intestine united end-to-end with the No. 4 Murphy button. The large-sized button was used because the caliber of the intestine was above the average and accommodated the button without difficulty. Thanks to Dr. Murphy, the approximation of cut intestine is the simplest part of intestinal surgery. It is simply a new version of the old story of Columbus and the refractory egg. The toilet of the peritoneum was made and the abdominal wound closed by Dr. Maston. The case was reported to the Portland Medical Society on January 23d, and the resected intestine measured in the presence of the Society full 43 inches.



The accompanying illustration shows the tumor with the intestine inflated. I confess to some astonishment when first measuring the gut, as the unfolding of the reduplications ran rapidly into feet. I had supposed I was removing about eighteen inches. The intestine resected was undoubtedly from the ileum, but just what portion I am unable to say.

The time occupied in the operation was about one hour. The patient was put to bed with a pulse of 84 and no evidence of shock. There was a reactionary temperature of 102°, but this fell to normal at the end of forty-eight hours, and subsequent progress to recovery was practically with-

out incident worthy of mention. Flatus began to pass about twelve hours after the operation. The bowels responded to enemata given once daily until about the sixteenth day, when they began to move of their own accord. The man was allowed only water for the first two days, and then liquid food, broths, milk, etc., until about the twentieth day, after which time suitable solid food was allowed until he has now, for some time, been taking regular diet. He has, in great part, recovered his strength and weight. This is now the forty-seventh day, and we have not yet seen the button. The nurses are instructed to watch carefully for it; but considering the early passage of formed stools, I think it may have been overlooked. However, when we bear in mind one of the cases reported by Dr. Murphy in *THE MEDICAL NEWS* of February 9, 1895, in which the button was passed after two months, and also with the entire absence of any symptoms indicative of the presence of a button in our patient, we have every reason to hope that no complications will arise at this late date.

In the interest of statistics in the use of the Murphy button I shall, however, report any developments that may arise in the future.

SUMMARY.

The case is interesting for the following reasons:

1. The extensive amount of intestine removed, forty-three inches, without apparent discomfort, gives us courage in this line of work, having been excelled in this country, so far as I know, only by the case of Dr. J. W. Elliot, of Boston.
2. The method described, whereby the points of section of the gut were definitely located, I think of value.
3. The ease and safety with which the mesentery may be torn in the course of the bloodvessels commend this method as superior to cutting.
4. It adds one more successful case to the already large and fast-growing record of the Murphy button.

The specimen was submitted to Dr. Everett Mingus, Professor of Surgical Pathology of the Medical Department of the Willamette University, who has returned the following report:

PORTLAND, ORE., February, 1895.

Upon examining specimen given by Dr. F. Cauthorn and taken from a tumor from the mesentery, I note the following conditions:

The specimen is firm on pressure and has a gritty resistance to the knife; that part of the specimen which corresponds to the periphery of the tumor has cyst-cavities.

Microscopically it is characterized by almost perfect uniformity in cellular construction. There are a few delicate bands of connective tissue passing in various directions through the specimen, but the fibrous tissue is an entirely subordinate element in comparison with the great mass of embryonal connective cells that make up the tumor. The embryonal connective-tissue cells are of the large spindle-cell variety, and toward the center of the tumor show degeneration; toward the periphery of the tumor there is considerable fatty tissue. The blood-vessels have no distinct walls.

From the above appearances the nature of the specimen is that of large spindle-cell sarcoma.

Respectfully, E. MINGUS.

A CASE OF INCISED WOUND OF THE PERITONEAL SURFACE OF THE KIDNEY.¹

By H. R. GAYLORD, M.D.,
RESIDENT PHYSICIAN, PHILADELPHIA HOSPITAL.

M. R., aged twenty-eight years, a widow, was admitted to the surgical wards of the Philadelphia Hospital on the night of December 31st. She had been removed from a disreputable resort, and the ambulance-surgeon had been told that the patient was suffering from a wound in the right side. When questioned, she gave the history of having fallen on a butcher's knife, four days previously, while at service in the country. The manner in which this had occurred was, that she had been going from the house to a near-by spring, carrying in her right hand a pan in which was a large butcher's knife. Through some mishap she had fallen and the point of the knife had entered her side. She appeared to be suffering acutely, and her face wore an anxious expression. The examination by the resident on duty showed the following conditions: There was what appeared to be a superficial wound over the eleventh rib on the right side, two-and-one-half inches long and at a slight angle to the line of the rib. It was partly united, and the usual antiseptic dressing was applied. The abdomen was distended and tympanitic, except in the median line, where there was dulness extending from the pubes to within two inches of the umbilicus. There was the appearance of general anasarca, most marked in the legs. Examination of the left lung elicited harsh breathing and bronchial râles. The right lung showed the same condition above the fourth interspace, with markedly harsh breath-sounds at the base. Respiration was labored and rapid, and the sputum was rusty. The temperature on admission was subnormal, but soon rose to 101°, and remained at that level. A hasty examination of the urine, which was pale in color and somewhat cloudy, showed 20 per cent. of albumin and a few granular casts.

No further data are recorded. Stimulants were given, and twenty-four hours later the woman's lungs had cleared up, her sputum was no longer rusty, and her pulse was satisfactory. The following morning she aborted, and a five-months fetus was delivered with the membranes intact. No unpleasant symptoms followed the abortion, and on the sixth day after admission the patient was in a condition to be transferred to the obstetric wards of the hospital.

On January 6th the woman came under my care, and I observed the following conditions: The lochial discharge was small in quantity, slightly tinged with blood, and not offensive. The woman was suffering from marked dyspnea, and requested to be propped up on pillows. She complained of pain in the right side, and examination showed the wound as already described, just over the eleventh rib, and well united. There were marked abdominal distention and some edema of the legs. Examination of the abdomen showed a large area of absolute dulness on the right side, extending from the umbilicus upward to the level of the fourth rib, and from the median line anteriorly to the vertebræ posteriorly. There was also what appeared on palpation to be a

¹ Read before the Philadelphia Pathological Society January 24, 1895.

superficial mass beneath the abdominal wall, in the right iliac fossa. There was some dullness in the flanks, but the remainder of the abdomen was tympanitic. Hyper-resonance was elicited over the entire left lung, with moist bronchial râles and harsh breathing. The right lung was somewhat impaired in resonance down to the fourth rib, where the absolute dullness described was encountered. The heart-sounds were weak and distant, the pulse rapid and compressible. The skin and mucous membranes were anemic. The temperature remained at about 100° F., with slight variations until death. Examination of the urine showed it to be pale yellow, slightly cloudy, of acid reaction, and with a specific gravity of 1012. By the microscope there were found a few pus-cells and some granular casts present. Albumin was present to 20 per cent. At this juncture the question of opening the abdomen was considered, but the patient's condition was such that surgical interference was impossible. The wound, though firmly united, was not believed to be penetrating, and the condition was diagnosed as abdominal hemorrhage. The patient received generous stimulation, but gradually grew weaker. On the morning of January 11th, while being turned on her side, she uttered a loud scream, and when the doctor reached her, two minutes later, she was pulseless and in a few minutes more had ceased to breathe.

ended, leaving no evidence of having entered the abdominal cavity. There was at the point just opposite the tenth rib, on the wall of the sac, some hemorrhagic infiltration. The walls of the sac, in some places, were of a dark-green color, showing signs of sloughing. The anterior surface of the liver, pressed to the median line, formed in part the inner wall of this cavity. On opening the thoracic cavity the lungs were found free in front, the right being pushed up by the diaphragm, the left with a few adhesions at the apex. The left kidney had the appearance of acute inflammation. The right kidney presented upon its anterior surface a lacerated wound, running obliquely, from within outward and downward, and measuring 3.5 cm. The wound penetrated well into the substance of the organ, and its sides showed evidence of blood-infiltration. The track of the knife could now be followed, from a point opposite where it entered the kidney, around the tenth rib to the external wound. On the wall of the sac at this point was what appeared to be the spot where the knife penetrated the abdominal cavity; this, however, was covered with lymph, and marked only by a hemorrhagic spot and some thickening of the sac-wall.

After removal of the matted intestines, with great difficulty, the uterus was found 9 cm. above the symphysis, and measured 6 cm. from the neck to the fundus. The



Wound in kidney.

The autopsy, on the day following death, showed the following conditions: The body was that of a well-nourished woman, with evidences of anasarca, especially of the lower extremities. The abdomen was prominent. On the left side of the abdomen 2 cm. below the ribs, in the axillary line, there was an apparently superficial stab wound. On incision a considerable amount of blood flowed out of the abdominal cavity. The intestines and great omentum were found matted together, and in front of the mass thus formed two large spaces, the walls of which were lined with lymph, contained large quantities of blood. On pushing the intestinal packet to the left an enormous cavity lined with lymph was found. This extended from the dome of the diaphragm, 9 cm. below the clavicle, down to about the level of the umbilicus. All the abdominal viscera were pushed to the left by the contents of this cavity, which were fluid, light purplish in color, and appeared to consist of an admixture of pus and blood.

The wound described penetrated just in front of the eleventh rib through the intercostal muscles, where it

placental site was on the posterior wall of the uterus toward the fundus. The surface of the placental site was raised and covered with a grayish deposit. There was a large sac of blood behind the uterus, extending well down into Douglas's *cul de sac*.

That uncomplicated wounds of the kidney on its peritoneal aspect are a rare occurrence can be best illustrated by the fact that a careful search through the *Medical and Surgical History of the War of the Rebellion* has failed to find a single case. This can easily be explained on anatomic grounds when we consider how limited is the area through which the knife must pass to reach the kidney without injuring the liver and intestines on one side, and the intestines and the stomach on the other.

Many such cases have been reported by Sir Astley Cooper, John Bell, Hunter, Ackerly, and others.

From a rather full search of the literature it would appear that this case is unusual in that the woman wandered about the streets for four days after receiving the wound (a fact which was ascertained subsequently),

and that by the time she was led to seek medical aid the parietal wound had united, thus leaving in doubt the true state of affairs. The patient passed no blood by the urethra, which has been explained by Morgagni as due to the fact that in extensive wounds of the kidneys, in which there is free hemorrhage, the blood-pressure in the kidney itself is so reduced that its excretory function ceases. There was no attempt at union of the renal wound, although Klebs reports having seen incised wounds of the kidney, and even bullet-wounds, filled by scar-tissue.

The accompanying illustration shows the kidney as it appeared after removal. Its marked flattening is due to the position it occupied as part of the sac containing the extravasation of blood, being pressed against the muscular structure posteriorly, from which position it was almost impossible to strip it without mutilation.

A CASE OF ACCIDENTAL SPONGE-GRAFTING OF THE CONJUNCTIVA OF EIGHTEEN MONTHS' DURATION, WITH SOME SUGGESTIONS UPON SPONGE-GRAFTING IN EYE-SURGERY.

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DEMONSTRATOR OF OPHTHALMOLOGY IN THE PHILADELPHIA POLYCLINIC, AND OPHTHALMIC SURGEON TO BETHANY DISPENSARY AND TO THE DISPENSARY OF THE CHILDREN'S HOSPITAL.

THE case herewith reported presents two interesting features:

I. The conditions under which the foreign material was introduced and the length of time it remained attached to the conjunctiva.

II. A beautiful illustration of the so-called process of sponge-grafting, which may suggest for it some further uses in eye-surgery.

The case was that of a colored girl, sixteen years old, who came to Wills' Hospital, complaining that there had been something growing in her right eye for the preceding eighteen months. On examining the eye I found a small swelling on the outer portion of the lower lid, giving the appearance of a fair-sized chalazion. As I drew down the lower lid to expose the palpebral conjunctiva a small mass protruded, yellowish in color, from which exuded a thin, purulent discharge, and resembling a papillomatous growth in appearance. Subsequent questioning showed that the girl had been an inmate of the House of Correction, having been discharged from that institution last August, after two years' confinement, and that six months after admission she noticed one morning this growth in the eyelid. She consulted one of the female attendants, and was told to bathe the eye in hot water. After two weeks of this treatment and the growth not disappearing, the attendant resorted to surgical means and attempted to remove it with a pair of forceps. This time she was more successful, securing a portion of the sponge and with it some of the conjunctival tissue, and causing some bleeding from the lid.

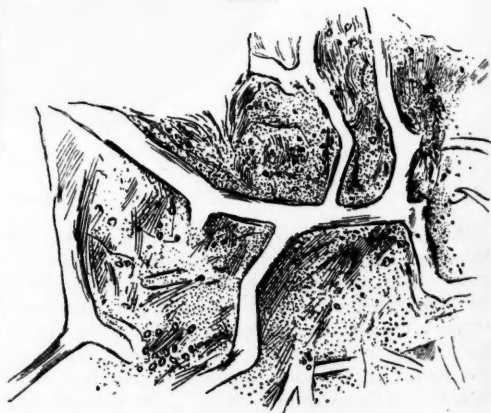
As I could not account for the presence of the growth, and also as it resembled sponge in character, I directed my questions with that object in view. The girl then stated that all the girls in her department washed themselves with one large sponge several times a week, and that often after washing she had noticed small particles

of sponge adhering to her skin. With this history I then examined a piece of the mass microscopically, and found it to be indeed sponge. The photograph taken did not turn out well, so I cannot show the position and relation of the sponge in the conjunctival sac. On examining the lid more closely I found the sponge firmly implanted in the palpebral conjunctiva toward the outer side of the lid, yellowish in color, oval in shape, and with ragged edges; it was 8 mm. long, 7 mm. wide, and 3.5 mm. high. As for the remaining portions of the eye, they were apparently normal, with the exception of that portion of the ocular conjunctiva that came in contact with the sponge when the eyelid was closed. Here the vessels were somewhat enlarged and the conjunctiva slightly hyperemic.

It would seem improbable that a foreign material the size of the piece of sponge stated, consisting of a substance subject to very septic surroundings (*i. e.*, a sponge used in the House of Correction on all kinds of people until it became so rotten that it was falling to pieces), could remain so long in the conjunctival sac without causing the slightest discomfort and only a very little irritation; but I think, if we look into the condition more closely, the absence of symptoms can be accounted for, as the sponge, being of soft animal tissue, becoming attached to the conjunctiva, the granulations springing up in the interstices of the sponge virtually made it a part of the lid itself, and it therefore caused no more irritation than any other small piece of granulation-tissue in the same position.

As a case of sponge-grafting, the formation of new tissue, as seen in the sketch of the section, shows it to be a perfect success.

FIG. 1.



Showing granulation-tissue intersected by sponge-fibers. $\times 300$.

This method of using sponge to replace lost tissue was first suggested by Prof. D. J. Hamilton, of Edinburgh, in 1881, who recognized the fact that in the organization of tissue the blood-clot or fibrinous lymph plays only a mechanical and passive part in any situation in which the organized tissue becomes replaced by a fibrous cicatrix. This being the case, he hit upon the idea of using sponge as a substitute, as the interstices of the sponge resembled the fibrinous network in a blood-clot or in fibrinous lymph, and at the same time being an animal tissue it would undergo tissue-digestion.

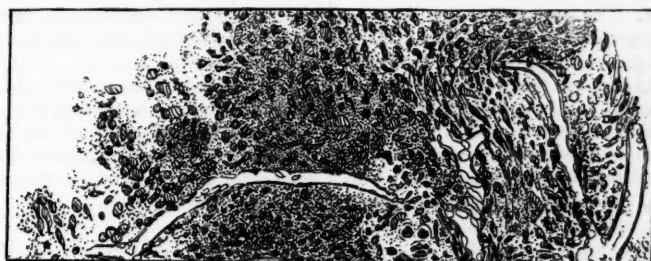
The process that occurs when a piece of sponge is placed in contact with an exposed surface and remains long enough is that a quantity of fibrinous lymph is effused into the sponge; this lymph becomes organized, and then is replaced by granulation-tissue, which extends and fills the interstices of the sponge, with, finally, a total absorption of the sponge-skeleton itself, leaving only a mass of cicatricial tissue.

The girl refused to allow me to remove the entire sponge at that time, but agreed to the removal of a small portion. This was excised, with a small piece of the surrounding tissue, which was cut and mounted by Dr. Charles W. Burr. In hardening the section the free portion of the sponge, that part not being infiltrated by new tissue, was detached from the remainder of the graft.

portions where the absorption takes place. My own opinion is that absorption is more probably due to a softening or separation of the fiber of a laminated structure by the pressure of the densely packed surrounding granulation-tissue, and, finally, absorption by the juices of the tissues, as the disappearance of the sponge is seen in only the deeper layers and apparently affecting the whole fiber at the same time.

So far as I can learn, this is the first instance in which sponge has been grafted, either intentionally or accidentally, on the conjunctiva. From the undoubted evidence of formation of new tissue, from the non-irritating properties of the sponge as seen, from the means under which it was introduced and the length of time it remained in the conjunctival sac, and from the microscopic

FIG. 2.

Showing absorption of sponge-fibers. $\times 450$.

This accident is almost impossible of avoidance, owing to the destructive effect of the hardening fluid on the sponge. I am, therefore, unable to show all the stages from the deep granulation-tissue to the lymph in free sponge.

The section presented the following appearance: A mass of granulation-tissue in different stages of development intersected in all directions by a network of yellowish bands that represent the sponge-skeleton. The base of the new growth is composed of embryonic, more or less developed, connective tissue, which in the deeper layers has quite replaced the sponge-fibers. Above the deep part, gradually shading from it and filling the interstices of the sponge, is the new tissue, which consists of new granulation-tissue, blood-cells, leukocytes, giant-cells, etc.

The evidence of tissue-growth by aid of sponge-graft is clear, but the mode of absorption or disappearance of the sponge-skeleton is as yet unknown, although this undoubtedly occurs, as we find in the deeper layers that the sponge-skeleton is more reduced in size and the fibers are fewer in number.

It is commonly believed, although the section does not show it, that absorption is due to an eroding influence of the giant-cells analogous to the action of the osteoclasts in bone-formation, as they are found in great numbers closely adhering to sponge-fiber.

In my sections there are several places showing giant-cells in close contact with the fibers, but I cannot see any evidence of absorption from this cause. I find, also, that these giant-cells are numerous in only the superficial portions of the graft, where we would not as yet look for absorption, and are extremely rare in deeper

proof of its final absorption, we have every reason to believe that sponge-grafting is a valuable means of replacing tissue lost by burns or injuries to the eyelids, which are eventually followed by ectropion, entropion, symblepharon, etc., and from the disfigurement caused by shrinking cicatrices.

A CASE OF GASTROPTOSIS AND MERYCISMUS, WITH VOLUNTARY DISLOCATION OF THE STOMACH AND KIDNEY.¹

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PROFESSOR OF PATHOLOGY, COOPER MEDICAL COLLEGE, SAN FRANCISCO,
CAL.

THE case that I have the honor of presenting to you this evening is unique in many respects, and I have been unable to find anything like it in medical literature. The young man is twenty years of age. In June, 1892, he fell on his right scapula, without any appreciable sequences. About eight months after the accident, in consequence of confinement incident to his occupation as a chemist, he began to suffer from neurasthenic symptoms, which had become intensified at the time he was referred to me by Dr. Jones, of this city. I have never regarded neurasthenia as a pathologic entity, but as a symptom of varied pathologic conditions; and I can say, without exaggeration, that I have never yet examined a case of so-called neurasthenia without discovering some distinct morbid condition which, when removed, cured the affection. The diagnosis of neurasthenia is a mistake

¹ Presented to the San Francisco Medico-Chirurgical Society, February 4, 1895.

in diagnosis. It is a conclusion based on subjective symptomatology. Subjective symptoms should only be employed as accessory evidence in our objective examinations.

This patient's chief complaint is and has been the rapid accumulation of gas in the stomach, and in his efforts to expel the gas he has developed unusual control over the diaphragm, to which I attribute some of the visceral phenomena that I shall presently show you. In general the patient suffers from nervous dyspepsia, prolapse of the transverse colon, stomach, and right kidney, a symptom-complex described by Glenard as *enteroptosis*, a term which in our case may be substituted by a better one, viz., *splanchnoptosis*. The prolapse of the abdominal viscera in this case is acquired, and may be attributed to a mechanical origin, superinduced by repeated voluntary diaphragmatic contractions of the abdominal viscera. The apex-beat of the heart can be felt in the fifth intercostal space within the mammary line, but by diaphragmatic action the patient can cause it to descend to the seventh intercostal space, a condition, if I may so call it, of *voluntary cardioptosis*. You will observe when I ask him to dislocate his right kidney, the latter can be distinctly seen and felt as it bulges in a limited area of the right hypochondriac region in the mammary line. The kidney recedes on suspension of diaphragmatic action. That the kidney resumes its normal place is evidenced by the distinct change in the percussion-note in the right lumbar region. I will now introduce the soft rubber stomach-tube, but before it enters the stomach I wish to direct your attention to a method of intra-thoracic auscultation recently described by Richardson. If I connect the terminal of my stethoscope with the stomach-tube, with the end of the latter distant about ten inches from the incisor teeth I hear the two sounds of the heart with unusual distinctness. I direct attention to this method of auscultation because I believe that, while its use will always be limited, it will prove of signal value when ordinary auscultation is unsatisfactory. In this case I thought a murmur was present, but suspicion was dispelled by intra-thoracic auscultation. I believe the latter form of auscultation to subserve another, to my knowledge, hitherto undescribed purpose in percussion of the stomach. In the employment of the gastrodiaPHONE the clinician is forced to admit the uncertainty of conventional methods in determining the area of the stomach. This I attribute to the fact that when percussion is attempted over the stomach, especially in pathologic cases, the transmitted percussion-blow causes the stomach to contract, and in place of dullness one obtains a tympanitic sound. Now, with the rubber tube in the stomach connected with the stethoscope, as in Richardson's method of auscultation, percussion conducted over the entire area of the stomach yields a clear metallic percussion-sound. This method of intra-gastric auscultation is worthy of development.

I will now introduce the gastrodiaPHONE. You will observe that I direct the patient to bring his chin forward on his chest. This maneuver greatly facilitates the introduction of the tube by bringing the esophagus in a direct line with the throat. You can now see the illuminated area. By shifting the lamp I can trace the stomach nearly to the cardiac orifice. Illumination shows the stomach to be prolapsed (*gastroptosis*) and

only slightly dilated. You can also see with what ease the patient shifts his stomach about; to the right, left, upward, and downward. The greatest voluntary dislocation is upward. He first dislocates the stomach downward to a point on a level with the crests of the ilia, then, by a supreme effort, he draws his stomach upward until it can no longer be seen. When the patient practises rumination he throws his stomach into a vertical position, which you can easily see. The phenomenon here noted may explain some cases of merycismus and food-regurgitation. A feature readily observed in this case is *peristaltic unrest* of the stomach. I will produce it by percussing the stomach-region. You note that the muscular waves diminish the extent of the illuminated area.

The patient can also develop a *phantom-tumor*. This he does by buccal insufflation of the stomach, and by relaxing his recti muscles and forcibly contracting his diaphragm; at the same time he arches the vertebral column forward.

As a concluding phenomenon the patient will demonstrate his ability to compress the aorta to obliteration, causing a disappearance of the femoral pulse. This phenomenon I likewise attribute to contraction of the diaphragm at a point where the artery passes through the muscle.

A CASE OF GLOSSITIS IN WHICH THE MEMBRANE COVERING THE TONGUE CONTAINED KLEBS-LOEFFLER BACILLI.

By H. R. WHARTON, M.D.,

OF PHILADELPHIA;
SURGEON TO THE PRESBYTERIAN, CHILDREN'S, AND METHODIST
HOSPITALS

ON November 19th, in consultation with Dr. Devine, I saw J. McK., aged six years, who was first seen by Dr. Devine on the previous day, and at that time complained of difficulty in swallowing and inability to close the mouth on account of the swollen and painful condition of the tongue. At this time the tongue was most swollen upon the right side, and was heavily coated with a thick patch of membrane that extended well over the whole dorsum of the organ. Upon examination of the patient I found the tongue much enlarged and partly protruding from the mouth, and covered with a thickened epithelium or membrane, which could be stripped off without much difficulty; there was also a patch of whitish membrane upon the inner surface of the right lip and upon the inner surface of the right cheek; the neck in the region of the submaxillary glands was swollen, and the submaxillary lymphatic glands were markedly enlarged. The patient had a temperature of 101°, and was unable to rest well upon his back on account of the profuse salivation, which in this position induced painful efforts at swallowing; he therefore preferred the sitting posture, leaning forward, to allow the saliva to escape from the mouth.

Upon opening the mouth widely I found the tongue very much enlarged, especially upon the right side, and, upon palpation with the finger at one point upon the dorsum, a sense of fluctuation was detected, so that I suspected that a collection of pus might be present. I removed a portion of the thick membrane from the dor-

sum of the tongue and placed it in a sterilized bottle for bacteriologic examination. I then made a deep incision into the tissues of the dorsum of the tongue on the right side, which was followed by the escape of a large quantity of blood and serum, but no pus was detected in the fluids which escaped. A short time after the incision was made the patient was able to close his mouth and to swallow without much difficulty, and was so much more comfortable that he was able to rest in the recumbent posture.

I saw the patient again with Dr. Devine on the following day, and, although he had had a more comfortable night, I found the tongue still swollen and covered with membrane, and he still had profuse dribbling of saliva. I again incised the tongue freely in the swollen area in two places, and explored the incision with a director to open up, if possible, any pocket containing pus, but there escaped from the incisions only blood and serum. In a short time after the incisions had been made he became very comfortable, the swelling of the tongue diminished rapidly, and in a few days Dr. Devine reported to me that he was entirely well.

The membrane removed from the tongue was sent to Dr. Ravenel, at the Department of Hygiene of the University of Pennsylvania, who kindly examined it, and made the following report: Cultures made from the membrane sent from the case of glossitis contain bacilli which, in their morphology, resemble those of diphtheria very closely. A second report states that a more careful examination confirmed the opinion previously given, and Dr. Ravenel states that the Klebs-Loeffler bacillus was present, and after isolating it in pure culture a guinea-pig of 400 gms. weight was inoculated subcutaneously, death following in seventy-three hours; a post-mortem examination gave a typical picture of the lesions produced by the Klebs-Loeffler bacillus; Dr. A. C. Abbott also certified as to the correctness of this report.

The case reported seemed to me to be one of ordinary glossitis, a comparatively rare affection, but of which I have seen a few instances, all presenting clearly the clinical symptoms shown in this case, including the profuse development of thickened epithelium or membrane which was present upon the inflamed tongue. Had I not had made a careful examination of this membrane by most skilful bacteriologists I should not have suspected the presence of the bacillus, for I have seen the same conditions presented in other cases of glossitis, and have in none of these cases noted the constitutional disturbances which would be presented when a diphtheric deposit involved an equal surface. Whether the case was one originally of glossitis, with a diphtheric infection grafted upon it, or whether the diphtheric infection was primary and the inflammatory condition of the tongue was secondary, I am unable to decide. It is also possible that many cases of glossitis in which there are thickened epithelium and membrane upon the inflamed organ are examples of a peculiar diphtheric affection, which does not impress the general system as unfavorably as the cases in which there is tonsillar, laryngeal, or pharyngeal deposits of membrane. This point can only be cleared up by a careful bacteriologic examination of the membrane from a number of cases, and I hope all those who come in contact with cases of glossitis which have not a distinctly traumatic cause will bear in mind

the possibility of their having some relation to a diphtheric infection, and will have made a careful bacteriologic examination of the membrane.

Gross mentions a diphtheric condition of the tongue in which the organ is tender and swollen, and covered with a thin layer of lymph of a whitish or grayish color, the gums, cheeks, and lips, and roof of the mouth occasionally participating in the deposit, a condition that he states is sometimes seen in cases of mercurial salivation. The element of glossitis was not well developed in the cases described by Gross, and I do not think they could be compared to the case here described.

The local treatment by free incisions, which is recognized as most serviceable in cases of glossitis, acted most satisfactorily in this case, which could hardly have been expected to be of service if the diphtheric infection was the primary cause of the glossitis.

112 SOUTH EIGHTEENTH STREET.

A CASE OF DEPRESSED FRACTURE OF THE SKULL IN A BOY, WITH PROFUSE HEMORRHAGE; OPERATION AND RECOVERY.

BY J. HOOD OWINGS, M.D.,
OF DEER LODGE, MONT.

I WAS summoned late in the afternoon of May 6, 1894, to go fifty miles to see Walter W., aged ten years, who had been thrown from his horse, dragged some distance, and kicked in the head; the accident having occurred about 5 P.M. on the afternoon of May 5th.

Arriving at the place of destination about 3 A.M. on the morning of the 7th, I found the lad in a semi-conscious condition, with a large contusion and a vertical scalp-wound very sensitive to the touch back of the left ear. His pulse was 125, the temperature 97°, the respirations 26 per minute, the pupils dilated, and with partial paralysis of the bladder and lower extremities. As I could obtain but scant lamplight, and there seemed to be no immediate danger, I concluded to await daylight.

At 8 A.M., everything being in readiness, ether-anesthesia was obtained, and I found that a large area of the skull was greatly depressed. The scalp being shaved, the vertical incision was extended to about two-and-a-half inches in length, and a horizontal one made over the central portion of the contusion at right angles to the former and two-and-a-half inches long. The periosteum was removed with a raspator, exposing an extensive irregular comminuted fracture composed of five pieces, and beginning just posterior to the junction of the middle of the concha of the ear with the scalp, and extending backward and upward for a distance of about two inches.

By the use of the elevator and sequester-forceps four pieces lying furthest from the ear were removed without any difficulty and with no untoward event. But when a piece lying close to the ear was removed there was a sudden and alarming gush of dark blood, which could only be staunched by keeping the finger pressed against the dura.

So great was the hemorrhage that it was impossible to tell whether the sharp bone had injured the brain-substance or simply cut into one of the sinuses of the dura.

In a few moments I was informed by an attendant that the pulse at the wrist had ceased to beat. I at once

had given hypodermically strychnin, gr. $\frac{1}{80}$, glonoin, gr. $\frac{1}{80}$, and followed by m.60 of old brandy. Meanwhile the wound was examined carefully for any débris, and thoroughly irrigated with warm mercuric-chlorid solution, 1 : 4000.

A compress made of sublimate-gauze five-eighths of an inch in width was placed over the injury to the dura, and held firmly a few moments, and then a second compress, somewhat larger, of the same material against the first, with the end left so as to protrude and afford drainage. The periosteum was now stitched together with catgut and the scalp with iron-dyed silk. Iodoform-dressings were applied externally and the head bandaged.

There being feeble pulsation at the wrist, the patient was now put to bed and hot-water bottles were applied. As soon as the little sufferer became conscious he complained of considerable pain, and was given one-eighth of a grain of morphin hypodermically; he then went to sleep and slept for three hours.

At 9 o'clock P.M. the child was awake and perfectly conscious; had voided urine; the pulse was 110, the temperature 99°, the respirations 20 per minute. He took a glass of warm milk and was given ten grains of sulfonal. On May 8th the child had had a fairly good night, had taken beef-tea and milk, had voided urine, and his temperature was 99.5° and his pulse 100. On the third day the dressings were changed and one piece of gauze was removed. The remainder of the gauze packing was gradually removed in a few days. There was some sloughing of the scalp, but healthy granulation took place and an uninterrupted recovery followed.

THERAPEUTIC NOTE.

CREOSOTE-ADMINISTRATION.

BY CHARLES WILSON INGRAHAM, M.D.,
OF BINGHAMTON, N. Y.

IN creosote we have a remedy productive of much good or a substance utterly worthless and even harmful. To-day it is the one, and to-morrow it is the other; but, as a rule, in either instance it is the physician or pharmacist and not the remedy that is at fault. Pure creosote, properly and systematically administered, is without doubt one of the most reliable and standard remedies in the entire pharmacopeia; and failure in its use is due to failure on the part of the physician to specify in his prescriptions the product of reliable chemists, and, further, to prescribe a proper method of administration. A pure beechwood-creosote administered in a proper way, as a rule, gives most successful results, while with a preparation, either good or poor, but improperly administered, failure and disaster will certainly attend our efforts.

Being a firm believer in the value of creosote in the treatment of a variety of morbid conditions, I naturally met with all the difficulties that attend the prescribing of this drug by those not familiar with its use, and after many failures and a few good effects, the questions arose in my mind, and particularly in cases of pulmonary disease, Does the benefit warrant the effort? Does a patient suffering from a chronic pulmonary affection, tuberculous or non-tuberculous, obtain from the inges-

tion and assimilation of medicinal quantities of creosote sufficient benefit, local or constitutional, to risk all the possible evil effects that occur in a certain percentage of cases? The experiences of physicians differ more radically upon this question than perhaps upon any other therapeutic agent, and many unfavorable opinions are often based upon experiences of a few disastrous cases in which the creosote itself was not in reality at fault.

Of all preparations of creosote for internal administration, the pill-form is probably the most inert, not to say harmful, for there is seldom sufficient creosote in the largest-sized pills to occasion any of its typical irritant effects. Although this mode is probably the most agreeable to the patient, and, for the reasons stated, more likely to be tolerated, the pill is absolutely valueless, except, perhaps, to correct some functional gastric disorder. Many patients, laboring under the delusion that they are taking creosote, persist in taking these pills to the advantage of no one but the druggist and the manufacturing chemist.

Next to the pill-form comes the capsule-method, which, I am safe to say, is far more effective than the pill-form; it has, however, certain disadvantages that render it far from being a perfect mode, and far from being satisfactory in cases of pulmonary disease. The amount of the vehicle is necessarily limited, and as the gelatin dissolves it brings a strong mixture of creosote in direct contact with the delicate mucous lining of the stomach. As a rule, the capsule-mass is so strong as to be caustic, and as it comes in contact with the gastric mucous membrane it occasions in many an unbearable burning sensation. While the capsule-form is preferable to the pill-form, it does not approach by a long way the goal of reasonable perfection. I do not wish to be understood as giving the impression that the capsule-method is wholly without value, because in some cases it answers the purpose, particularly when large doses are not required and when the administration is not to be long continued.

In creosote carbonate we have an agreeable, pleasant, and, to a certain extent, effective preparation; and while the results that I have obtained from this preparation have fallen short of my expectations, I still believe it has sufficient value to warrant its trial in cases in which other methods of exhibition have failed. It is non-irritant, non-caustic, and can be taken clear without unpleasant after-effects—certainly a very agreeable and desirable property. While its introducers claim that extremely large doses (children, from fifteen to ninety grains; adults, from one to four drams) can be taken without unpleasant effects, I have, however, had reason to regret the exhibition of heavy doses, as in two instances doses of thirty grains caused serious depression in adults, which continued for several hours. In justification of the preparation, however, I am bound to say that, as a rule, doses of from twenty to forty grains to adults are well tolerated; and as the preparation is claimed to contain over 90 per cent. of beechwood-creosote, creosote carbonate certainly offers a medium for the administration of larger doses than by any other known method. Still, it is a question as to whether from twenty to forty grains of creosote carbonate equal from three to six grains of pure beechwood-creosote.

It is a well-known fact that creosote is soluble in alcohol to a certain extent, and, by virtue of this fact, it

will form a perfectly clear solution in whisky. The great drawback, however, to this solution is the fact that it will not bear dilution, the mixture being instantly decomposed by the addition of water, a fact that deprives the method of all value.

It is claimed on good authority that tincture of Panama wood (*Quillaia saponaria*), in the proportion of eight parts to one of creosote, will form a permanent solution and one that can be diluted with tepid water without decomposition—which is due to the presence of saponin. In this form creosote, is said to retain its efficacy and is well tolerated. I have had no experience with this method because of the difficulty in obtaining the tincture of Panama wood.

Three years ago I adopted a method of administering creosote that has given me such satisfaction as to be worthy of general consideration. The results could not be bettered, as regards tolerance, assimilation, non-irritation, and desirable effects upon the general system, and they excel those of any other method I have ever used.

In the first place, it may be well to say that I believe my results are to a great extent due to the splendid preparation of beechwood-creosote (Merck's) which it has been my good fortune to obtain. In appearance it is as clear as water, and in quality approaches more nearly the standard of purity than any other preparation known to me.

I give the patient a one-ounce bottle of this creosote and an empty eight-ounce bottle. Upon the eight-ounce bottle I place the following label:

"Directions: After putting in the correct number of drops, according to directions on the small bottle, fill with cold water and take the entire contents of the bottle during the day, in equally divided doses, at regular intervals. Make at least six or eight doses. Shake thoroughly each time before taking."

Upon the bottle of creosote this label is pasted:

"Put four drops in the eight-ounce bottle, and take according to the directions on that bottle. The second day put in five drops, and the third day put in six drops, etc. Continue to increase one drop per day, until twenty-four drops are taken daily. Do not increase beyond twenty-four drops without instructions."

One ounce of creosote will last the patient a full month at the beginning, but after the first month two ounces will be taken each month.

Creosote in this form may be intrusted to the care of any intelligent adult, and I have never had an accident occur from the method. As the daily amount reaches from twelve to fifteen drops, it will require further dilution. The dose can be emptied into a glass tumbler and a sufficient additional quantity of water quickly added. By this method the patient has a fresh preparation daily, and when taken in this highly diluted aqueous suspension it is wholly non-irritant to the mucous membrane of the mouth, throat, or stomach. When desirable a small amount of some one of the vegetable bitters may be added each morning to the eight-ounce bottle, which will assist in stimulating the appetite.

By commencing at the minimum dose, one-half drop (eight doses per day), and systematically increasing the daily quantity one drop per day, twenty-four drops can

be taken at the end of three weeks with, in nine cases out of ten, no difficulty whatever. In a few cases I have increased the daily amount to thirty-five drops without gastric or renal disturbance. By this method a tolerance is established, and a maximum dose may be maintained indefinitely in a majority of cases so far as any unpleasant symptoms are concerned.

As to just what benefit is derived from creosote-administration in cases of subacute and chronic pulmonary diseases, the question is not in the scope of this paper; but as so many physicians place their chief reliance upon this remedy in the belief that it stimulates the appetite, increases and sustains the nutritive processes, controls pus-formation, and thereby increases the general vital forces or resisting powers, my suggestions will, I believe, meet with a certain amount of approval.

MEDICAL PROGRESS.

Successful Celiotomy for Perforation of the Gall-bladder in the Sequence of Typhoid Fever.—MONIER-WILLIAMS and SHIELDS (*Lancet*, No. 3731, p. 534) have reported the case of a woman, thirty-one years old, who, on the eleventh day of an attack of typhoid fever, was suddenly seized with acute abdominal pain associated with symptoms of collapse. The possibility of perforation of the intestine was considered and appropriate treatment instituted. The gravity of the condition subsided in the course of a few days. During the fourth week the temperature gradually fell by lysis, finally reaching the normal, where it remained for nearly two weeks. In the sixth week the patient experienced some slight abdominal pain, which gradually increased in intensity and became associated with tenderness referred to the region of the hepatic flexure of the colon. The temperature again rose, and dulness on percussion was found in an area about the size of an orange in the region mentioned. The patient grew progressively worse and signs of localized peritonitis in the right hypochondrium appeared.

After mature consideration operation was decided upon. Upon opening the abdominal cavity it was at once obvious that the most acute focus of inflammation was situated in the right hypochondriac region. The intestines were distended, red, and congested, and covered with purulent lymph, while among their coils some free turbid fluid could be seen posteriorly. There was much purulent lymph matting the tissues together beneath the liver. While disentangling the adhesions and sponging away the soft lymph under the liver the gall-bladder came into view and was seen to be deeply inflamed, of a dark-plum color, rigid, thickened and adherent. It was tightly distended, but not much enlarged. Low down, near the neck of the gall-bladder, was a sharply circular, sloughing ulcer of considerable size. Its floor was yellow, and it was surrounded by a vivid red zone of intense hyperemia. On stroking it with a probe, fluid escaped at one point, showing that leakage of the contents had already occurred. A fine trocar was introduced, but no fluid escaped, and the gall-bladder was opened at its fundus with scissors. About an ounce-and-a-half of thick and offensive pus, unmixed with bile, was evacuated into a glass held in the abdominal cavity, sponges being packed around to prevent contamina-

tion of the peritoneum. The gall-bladder appeared to be converted into a suppurating sac, probably cut off from communication with the biliary flow. The viscous was cleaned out with pledgets of wool held in forceps and a careful search made for a calculus by a probe internally and the finger externally, but no foreign body could be detected; nor could it be discovered to what the closure of the cystic duct was due. The tissues were so disorganized that attempts to pass a probe into the common duct were not persisted in.

It was impossible to close the opening in the neck of the gall-bladder by means of Lembert sutures, and it was not deemed practicable to do anything with the gall-bladder, still less to bring it to the surface of the abdominal wound. The wound in the fundus was, therefore, attached to the parietal peritoneum, and the portions under the liver were cleansed by flushing with warm water and repeated sponging. A horizontal incision at right-angles to the first was made to facilitate drainage. To permit of the return of the bowel a fine trocar was introduced obliquely into the enormously distended ascending colon, passing for some distance along the longitudinal bands before perforating the mucous membrane. A large quantity of flatus escaped, aided by manipulation of the intestine. A glass tube was passed deeply into the lesser cavity of the peritoneum, and a long and liberal strip of carbolyzed gauze firmly packed around it, so as to flatten the empty gall-bladder against the under surface of the liver and shut off the intestine from contact.

The abdominal wound was closed with fishing-gut sutures and varnished over with collodion, finally being covered with a cyanid dressing. The operation occupied an hour, and at its conclusion the condition of the patient was satisfactory. The woman afterward suffered somewhat from collapse, with vomiting. For several days nutrient enemata were given. There was little discharge from the wound, and the glass tube was in time replaced by a rubber one. For a few days severe colicky pain in the right hypochondrium was experienced. The woman recovered perfectly, only a small suture-sinus remaining.

Amputation of the Entire Upper Extremity (Including the Clavicle and Scapula) for Sarcoma Following Fracture of the Clavicle.—At a recent meeting of the Philadelphia Academy of Surgery Dr. W. W. KEEN reported the case of a man, aged twenty-one years, who had broken his left collar-bone by a fall some nineteen months previously. Eleven months later a tumor appeared at this point, which, together with one-and-a-half inches of the clavicle, was soon afterward removed. The neoplasm, however, immediately reappeared, and grew rapidly. For a month the patient was treated with the toxins of erysipelas and prodigiosus, but without obvious benefit. He presented a large tumor extending from the shoulder to the base of the neck and attached to both clavicle and scapula, and reaching to within two inches of the inner end of the clavicle. The growth did not appear to be infiltrating, but encapsulated. It seemed to be very movable with the shoulder, and there was not the slightest edema of the arm.

The tumor was ulcerated at two points, and the skin was branny and thick. An incision was made at the

inner border of the tumor with its center at the clavicle and another at a right-angle along the line of the clavicle down to the bone. Flaps were dissected and the tumor drawn away so as to uncover as much of the clavicle as possible, and two-and-a-half inches of the inner end of the clavicle removed. The vessels were readily dissected loose and followed down to the upper border of the pectoralis minor. At no point were the tissues under the great pectoral involved. In order to tie the vessels at so low a point the vertical incision had been gradually extended nearly to the axilla, and having secured the vessels the amputation was proceeded with. As the removal of the tumor would remove also so large a portion of the skin that it would be impossible to approximate the edges, the incision on the arm was carried nearly down to the elbow, and a flap of healthy skin from the inside of the arm was dissected and turned upward so that the lowest end near the elbow became the highest when turned upward on the neck. In dissecting the arm loose the larger part of both the pectoral muscles was removed, and a number of smaller vessels were ligated. The posterior incision was now made, cutting as wide of the tumor as was possible, the incision passing nearly along the posterior border of the scapula. The separation of the extremity was readily effected, and a moderate number of vessels ligated. After renewed disinfection of the large surface it was closed. The elbow-flap was turned upward on the neck and the entire raw surface was covered with skin without tension. At four points between the stitches small portions of iodoform-gauze were inserted to act as drains.

The patient was put to bed with apparently little shock, his temperature being 97.6°, though the operation had lasted nearly two hours. His recovery was rapid and satisfactory, the temperature rising only once to over 100°. On the sixth day he was out of bed. A small portion of the posterior edge of the flap from the arm sloughed. But for this he would have been entirely well within ten days.

Puncture of the Base of the Brain, with Loss of Memory.—ABEL and COLMAN (*British Medical Journal*, No. 1781, p. 356) have reported the case of a railway-fireman, thirty-six years old, who, while carrying an oil-feeder in his hand, slipped and fell forward, the spout of the can being driven forcibly into his face. There was transitory loss of consciousness, followed by twitching and jerking-movements of the limbs, most marked on the left side, the legs being drawn up and the body bent forward. There was no hemorrhage from mouth, nose, or ears. The metallic spout of the oil-can was firmly fixed in the base of the skull, and was only removed from the grasp of the bone by firm traction with forceps. It had passed upward and toward the middle line, with its concavity directed from the middle line. Its end was firmly plugged by bone from the base of the skull. No hemorrhage followed its removal. The wound was cleansed and a simple iodoform-dressing applied. The violent jerking-movements were replaced by a few occasional twitchings. It was now found that the left side of the face and the left arm were paralyzed, with inability to close the left eye completely. The man became drowsy and confused, and was unable to give replies to any but the simplest questions. The temper-

ature rose to 102° ; the pupils became contracted, the right in a greater degree than the left; both reacted to light. The left leg began to lose power. There was complete anesthesia of the right eyebrow and of both eyelids and of the right cheek for an uncertain distance below the lower eyelid. The conjunctiva of the right eye became congested, and a small ulcer formed on the right cornea, which healed without much trouble. In the course of a few days power began to return, first in the left leg and afterward, though to a much less extent, in the left arm. For two weeks there was drowsiness, and the man slept considerably. He was apathetic, and for many days passed urine in bed. He could not recognize his wife or old comrades, and had also difficulty in recognizing common objects and their uses. The most remarkable feature was the loss of all memory of his life for twenty years before the accident. As time went on, the period included in this loss of memory was reduced to five years preceding the accident. The hemiplegia persisted, although the man was able to get about. Sensibility was lost to all forms of stimuli in the right upper eyelid, forehead, and anterior part of the scalp, corresponding with the distribution of the supra-orbital and nasal nerves. The cornea was completely anesthetic, and the right cheek an inch-and-a-half external to the angle of the nose presented a small patch of anesthesia. There was undue emotional mobility, the patient laughing or crying on slight provocation. The condition of mind-blindness remained. It is believed that the spout of the oil-can must have passed under the zygoma to the base of the skull, perforating the great wing of the sphenoid bone and penetrating the centrum ovale, injuring the anterior fibers of the motor tract in the internal capsule near the genu.

Uremic and Dropsical Coma.—In an interesting article in the *Asclepiad*, second quarter, 1894-'95, p. 113, SIR BENJAMIN WARD RICHARDSON divides cases presenting disease of the kidney leading to suppression of urine into three classes: First, those in which there is acute uremic coma occurring suddenly without dropsical exudation, and in which the coma is deep, the breathing stertorous, the muscles restless or convulsed, and the eyeballs move from side to side or upward and downward, or obliquely, symptoms the same as those which can be synthetically induced by the introduction of urea into a healthy organism. The temperature is likely to be slightly above the normal. These, it is assumed, depend on diffusion of urea, in a comparatively concentrated form, through the system, so that true toxic action is acutely developed. In cases of this group bloodletting is of distinct value, and should not be prohibited even by an unfavorable pulse. The second class includes cases in which coma appears with dropsical symptoms—edema, ascites, or pleural effusion. The symptoms seem to depend on free diffusion of urea through the system, but with a considerable amount of watery, fluid serum. The tendency is for the temperature to be slightly below normal. In these cases bloodletting, while indicated, seems to give only relief and no more. In the third group belong the cases in which, with universal dropsy, there are comatose conditions not amounting to deep coma, and in which the drawing off of fluid from the cavities of the chest or abdomen, or from the cellular

tissue, relieves the symptoms, dissipates the coma, and gives for a time a new lease of life. The condition appears to be a widely spread dropsy, in which urea, if it be accumulated at all, is so extremely attenuated with water that its toxic effects are not manifested, but the pressure produced by the effused serum tells upon the central nervous system and gives rise to the semi-comatose condition. The temperature is usually below normal. When these symptoms are prolonged the cases are commonly designated as those of chronic dropsy. In the cases of this class bleeding would be capable of no real service; here the artificial removal of the fluid by tapping is indicated.

Placenta Prævia with Twin Pregnancy.—PALCHOWSKY (*Centralblatt für Gynäkologie*, 1895, No. 8, p. 213) has reported the case of a woman, thirty years old, who, in the seventh month of her eighth pregnancy, had a copious uterine hemorrhage. Examination disclosed the existence of twin pregnancy with placenta prævia; one fetus presenting by the vertex and one by the pelvis. Dilatation of the os uteri proceeded slowly until it was possible with the fingers to displace the head of the first child laterally and effect podalic version, and extract the child. The pelvic presentation of the second child became converted into a transverse position. Podalic version was again resorted to, and the child successfully extracted. The hemorrhage at once ceased. The children were asphyctic, and one less well developed than the other. The placenta of the first was expelled after the lapse of ten minutes; the portion situated at the os was filled with thrombi and infarcts. The second placenta was removed after the lapse of two-and-a-half hours. The central portion was firmly adherent to the uterine wall. One of the children died an hour and the other two-and-a-half hours after birth. The puerperium was uncomplicated.

Traumatic Rupture of the Stomach.—LAURENCIN (*Lyon Médical*, 1895, No. 4, p. 110) has reported the case of a man, sixty years old, who in dismounting from a heavily laden wagon which he was driving, in order to secure his hat, which had blown off his head, frightened the horse and was run over by two of the wheels, which passed over the abdomen obliquely in a line from the left iliac crest to the right false ribs. The man was able to arise, and succeeded in getting to his room, and was subsequently transported to the hospital, where, three hours after the accident, he partook of a considerable quantity of soup. He presented several ecchymoses, but no broken or displaced bones could be found, and there was little complaint of spontaneous pain. The action of the heart was feeble and rapid, but regular, and the pulse was scarcely perceptible. Notwithstanding the absence of grave symptoms, death took place eight hours after the accident. Upon post-mortem examination a somewhat transverse rupture of the stomach three inches long, and involving the anterior aspect of the viscus in the neighborhood of the lesser curvature, was found, the contents of the organ having passed into the peritoneal cavity.

Bacteriologic Examinations in Diphtheria.—SILBERSCHMIDT (*Münchener medicinische Wochenschrift*, 1895, No. 9, p. 185) has reported the results of bacteriologic ex-

aminations in one-hundred-and-twenty-five cases of diphtheria. Typical diphtheria-bacilli were found in ninety-one cases, but in only one case associated with other micro-organisms. In the remainder, principally staphylococci and streptococci were found. An investigation was also made of the throats of children treated with the antitoxin. In these diphtheria-bacilli were found as late as thirty-two days after the injection. The number of bacilli was, as a rule, distinctly diminished several days after an injection. In six cases in which the examination was made it was found that the bacilli present after injections with the antitoxin preserved their virulence.

The Vitality of Cholera-bacilli in Fecal Matter.—ABEL and CLAUSSEN (*Centralblatt für Bakteriologie und Parasitenkunde*, Band xvii, Nos. 3 and 4, p. 118) have found that cholera-bacilli disappear from fecal matter, as a rule, within twenty days, though rarely they may be observed for thirty. Their continuance for a longer period is exceptional. In some instances the organisms cannot be distinguished after the lapse of two or three days, so that examination of the stools for diagnostic purposes should be made as soon after their evacuation as possible. In many cases a positive result should be obtained if to from 2 to 20 c.c. of fecal matter from five to ten times as much of peptone-solution are added, and peptone tube-cultures are made from the surface after the lapse of twenty hours.

Thirteen Cases of Hereditary Ataxia in a Single Family.—NEFF (*American Journal of Insanity*, January, 1895) has reported thirteen cases of ataxia in adults in four generations of one family, with a distinct hereditary history. All of the cases were characterized by a marked similarity of the symptoms. In all of the cases but two the onset was observed between the ages of fifty and sixty-five, and of these two the first symptom was noted in the one at the age of sixty-two, and in the other at the age of sixty-eight. In four of the cases insanity also developed, assuming the form of dementia, and differing in degree and corresponding to the dementia resulting from organic brain-disease.

THERAPEUTIC NOTES.

Successful Employment of Bone-marrow in a Case of Pernicious Anemia with Arsenical Palsy.—BARRS (*British Medical Journal*, No. 1781, p. 358) has reported a case of pernicious anemia in a miner, forty-three years old, who appeared to be at the point of death, so that arsenic was given in increasing doses. The largest dose reached was nineteen minims, and the largest quantity taken in any twenty-four hours was seventy-five minims. As a result a peripheral neuritis developed, while the condition of the patient failed otherwise to improve. The administration of fresh bone-marrow, three ounces a day, was now begun, and in a short time the appearance of the man became much improved, while the number of red corpuscles and the proportion of hemoglobin progressively increased, finally reaching the normal. The general condition improved in a corresponding degree, although the palsy due to the neuritis persisted.

The marrow was prepared by mixing three ounces into a paste with an ounce of port-wine, an ounce of

glycerin, and five drams of gelatin. The gelatin was soaked in sufficient water to soften it, and then mixed with the glycerin, the mixture being kept in a mortar previously made hot with boiling water, while in another mortar made hot in a similar manner the marrow and wine were mixed. Finally, the contents of the two mortars were thoroughly incorporated and allowed to set.

Disinfection with Iodin.—SIR BENJAMIN WARD RICHARDSON (*Asclepiad*, second quarter, 1894-'95, p. 157) recommends iodine as a useful disinfectant, which may be used as a solution in spirit, in which rags are dipped and then suspended in the room to be disinfected; or the substance may be employed in the solid form, or in extreme cases in the form of vapor. Used in the solid form, a dram may be placed in a cup, glass vessel, or common chip-box, which is covered with a piece of gauze or muslin. The substance soon diffuses through the air of the apartment, which it thoroughly disinfects if organic matter be present. When rapid disinfection is desired the iodine may be placed on a porcelain or a common plate or saucer, and the heat of a candle applied beneath. The vapor of iodine appears to produce little effect on gilded or metallic surfaces, but it stains marble or white painted surfaces when it comes directly in contact with them. It is essential that the ventilation be not neglected in using iodine as a disinfectant. The substance may also be successfully used when the breath is fetid, being carefully inhaled from a small bottle, and avoiding dryness or soreness of the nostrils or throat. It also makes a useful application to fetid and indolent ulcers and sores. For this purpose it may be placed in a chip-box beneath the bed-clothes.

The Treatment of Diphtheria.—SIEGERT (*Therapeutische Monatshefte*, 1895, No. 3, p. 118) details the method of treating diphtheria employed at the Children's Clinic of the University of Strassburg. The local measures consist in the application of cold in the form of an ice-collar, in the administration of bits of ice, in the solution of the membrane by means of applications of a ten per cent. solution of papayotin repeated at intervals of from five minutes to two hours. Sometimes to the last a five per cent. solution of carbolic acid is added. The air of the apartment is impregnated with a spray of $7\frac{1}{2}$ parts of sodium chlorid, 250 parts of glycerin, and 750 parts of distilled water. Tracheotomy is resorted to when simpler measures do not suffice to relieve laryngeal obstruction. Constitutionally, over-feeding is enforced, the temperature is sustained, and internal medication is avoided so far as possible. In this way, during a period of five years, the mortality among 658 cases was 32.5 per cent.; among 397 requiring tracheotomy, 34.3 per cent.; among the remainder, 261, 14.6 per cent.

The Treatment of Exophthalmic Goitre with Thymus Gland.—OWEN (*British Medical Journal*, No. 1781, p. 361) has reported a case of exophthalmic goitre of twenty years' duration in which distinct relief followed the administration of what was believed to be thyroid gland, but which upon investigation proved to be thymus. On discontinuance of the gland the symptoms began to reappear, and relief again followed the resumption of treatment. One lobe of the cervical portion of the thymus was given three or four times a week.

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QUESTIONS OF NOMENCLATURE.

CRITICISM has lately been made concerning the use or abuse of certain medical terms, and the subject is one that is always most pertinent. There is, of course, a danger of losing the thing in too intense attention as to the method. "Brisk little somebodies critic and whippersnapper, in a rage to set things right" are perhaps altogether too numerous, but the desire to use language accurately is entirely proper. Even if one has not much to say, the saying it rightly will win attention when the possibly more important thing will be ignored because of obscurity or inaccuracy of expression.

The great advance in scientific knowledge and in precision as regards the etiology and pathology of disease have been and will long remain the chief factors in rendering absurd much of the older nomenclature and in necessitating constant changes in order that our naming of things shall keep pace with our better knowledge of them. The more accurate name is in itself a decided factor of progress, because it necessarily carries knowledge with it. "Phthisis" (or "consumption") is but one symptom of many diseases, so that to use it as a synonym of but one disease, "pulmonary tuberculosis," is of itself a false statement. But besides

this the two older terms tell the learner nothing about the morbid process, except the symptom of wasting, or emaciation, whilst the term pulmonary tuberculosis locates the chief seat of the lesion and states what is its nature. So it is with "Bright's disease," instead of "nephritis," and so it is with almost every disease that has been called by a man's name. We should therefore seek to stop this habit so far, at least, as diseases are concerned. There are something like two-hundred of these eponymic diseases, some having been called after as many as half-a-dozen or more different physicians.

In not a few instances, such as Addison's disease, the eponymic custom must obtain, because we do not know yet enough about the diseases to give them a suitable name.

In reference to other things this rule will not hold, and we do not see any strong objection to the eponymic habit. When, for example, we wish to speak of the pupillary reflex called after Robertson, of the treatments called Credé's or Sylvester's, of the test called Moore's, of the symptoms called Romberg's, of the method of staining called Fraenkel's, or of the experiment called Scheiner's, one sees no objection to naming them thus, and many are the reasons for it. The terms are much shorter than any conceivable circumlocutions, and the discoverer may thus be given the proper honor with no detriment to medicine and with no unnecessary labor for medical students. As to operations and tests, one hardly sees how we could do without the method, as any one of the many hundreds of such names saves possibly a page or more of most tedious circumlocution. In some cases we would be glad to have an eponymic designation for a more round-about or equally non-descriptive designation. What, for example, is more absurd than to call "the patellar-tendon reflex" a "knee-jerk," the "knee," of course, not "jerking" at all. To call it, *e. g.*, Charcot's reflex or Brown's kick would be almost as descriptive, and somewhat shorter than "the patellar-tendon reflex"—a term that is also to some extent a misnomer.

All things considered, therefore, we would recommend the abandonment of eponymism as regards diseases, and would advise giving diseases more accurately descriptive or scientific names. In the case of signs and symptoms of disease, of operations, of tests, of stains and bacteriologic methods, of methods of treatment, etc., the plan of using the discoverers' names to designate them has usually

decided advantages, and when a shorter or more scientifically descriptive term cannot be found, personal nomenclature should be encouraged, as well to honor the discoverer as to aid all aftercomers in their philologic studies.¹

Medicine illustrates even more than Law how difficult it is for the modern civilized world to slough the old medieval Latin snake-skin. This is exemplified especially in the titles of articles and the names of diseases. Sometimes the limit of the ridiculous is reached when in such titles one finds a sandwich of English and Latin in disjointed jumble. A fellow starts off with a pompous Latin title, let us say, *otitis media purulenta*—and then his Latin gives out, and for awhile he again turns to English—with *coincident closure of the* (and down comes the rest of the Latin sandwich) *meatus externus*!

Isn't it about time to quit dragging about after us this half-sloughed medieval mummary? There are no ideas that cannot be expressed in healthy modern virile English. Scientific men do not need and should not wish to dress themselves or their ideas up in the cast-off petticoats and dead languages of passed ages. Even in our prescriptions the arguments for the retention of Latin are musty and dusty. It is said that we must not let the patient know what he is taking; but that is another way of saying that we must wrap ourselves up in mystery and conceit. If our real desire were to keep the patient in ignorance, the chemic formulæ would answer the purpose much better than our so-called Latin. Another excuse is that Latin, being a universal language, our prescriptions will be better understood in Europe; but every really educated man is aware that the average European druggist knows English much better than the average American doctor knows Latin.

Medical language has a somewhat fatalistic tendency to philologic barbarism that healthy modern minds should withstand. No science is so given to absurdities of nomenclature. Even a much-used synonym of physicians is philologically more than outlandish. The French have a word *praticien* for one who practices, *e. g.*, the law, and we have the same word in medical English, unused, but properly formed—*practician*. With megalosaurean wit we

devise and use the linguistic outrage, *practitioner*. With just as much reason should we say *academicianer*, or *dentistianer*. A practitioner is, of course, one who practices; a practitioner, therefore, must be one who practitioners!

In ophthalmology there are a number of terms much used and improperly used. The Greek word, *ὀφθαλμός*, names the whole eye, but we persist in using *ophthalmia* for localized affections of the conjunctiva. Let us say *conjunctivitis* instead of *ophthalmia*, *conjunctivitis neonatorum*, or *conjunctivitis of the newborn*, instead of *ophthalmia neonatorum*. "Purulent conjunctivitis of the newborn" has a footstep as heavy as that of the giant Fafner. *Eye-ground* is for several reasons preferable to *fundus oculi*. Even if there were no other *fundi* to confound, the English is better than the Latin. In the same way the whole fussy botheration over *nyctalopia* and *hemeralopia* would have been avoided by the frank old Anglo-Saxon terms, *night-blindness* and *day-blindness*. The desire for an odd name, for a mysterious one, or for a polysyllabic monstrosity, is accountable for many words that make us laugh. Some uses of the words *refract*, *refraction*, and *refractionist* have been lately criticised, but their critics are hypercritical, and the convenience, nay, necessity of the words will keep them very much and very long active. Likewise when there is discovered a drug that is a "cycloplegic" and not a "mydriatic," we may consent to unlearn the commonly used word and emphasize the distinction.

One of the greatest needs of reform is in chemic nomenclature. *Hydrogen dioxid*, *carbon dioxid*, *mercuric chlorid*, etc., should be substituted for the old-fashioned *peroxide of hydrogen*, *carbonic acid*, and *bichloride of mercury* or *corrosive sublimate*. The modern scientific name of "carbolic acid" is *phenol*, and of "glycerin" *glycerol*.

There are three roots with their compounds over which the linguistic battle will long endure. The dictionaries usually continue to spell them one way (though the word-men are not by any means of a common mind), while we pronounce, and, indeed, usually write them, another. Etymologically, of course, *chorio-*, *thyreo-*, and *angeio-*, are correct; but we all speak of the *choroid*, the *thyroid*, and we not seldom write *angioma*.¹ Shall our preaching and

¹ Strange whims characterize us, however, sometimes. A man is named Argyll Robertson, and when we name a phenomenon after him we keep the first name—most uselessly and cumbersome. In all other cases we dispense with the first names. Why is not *Robertson's pupil* sufficient also?

¹ *Aneurysm*, though etymologically preferable to *aneurism*, is usually written in the latter manner. As one form is not shorter than the other, no real principle is at stake, and one may follow the crowd if he will.

our practice be allowed thus forever to contradict each other? We have repeatedly intimated in these columns that as applied to medicine the stickler for etymologic accuracy has a woful hard row to hoe.¹ The convenience of the instrument-user, accuracy of expression, and conciseness—these must necessarily be our guides in the use of the instrument, language, rather than any fetich-worship of it. Despite all our conservatism and reverence for “the good old forms,” words and language will change, and all the King’s (English) horses and all the King’s (etymologic) men cannot make Humpty-Dumpty what he was again. Old words will die and new ones will be born, and here, as well as over birth and death everywhere, we have little volitional control. The part of wisdom is to follow willingly where willy-nilly we must go, rather than be dragged thither.

The use of the hyphen is a stumbling-block to many writers. We think it should be used in compound words when the two words joined would be complete words if standing alone, the compound being used as a single idea or term. Such compounds are, *e. g.*, *throat-symptom*, *joint-cavity*, *bone-chips*, *wound-edges*, *tissue-proliferation*, *iodoform-gauze*, *pus-microbes*, etc. The hyphen does not seem to us to be needed when only a root-form makes a part of the compound that is not a completely formed word when standing alone. The parts in such cases should not be separated by a hyphen, but should be fused into a single word. Such words are: *antitoxin* (not *anti-toxin*), *osteomyelitis*, *urethrovaginal*, *coexisting*, *hematosalpinx*, *hemotherapy*, *thyrohyoid*, etc. In the same way the dieresis may be omitted. It is but a relic of a childish time, when it was supposed that diacritic marks were necessary or that they could teach pronunciation.

HEREDITY AS A FACTOR IN DISEASE.

In former years heredity was considered a most important factor in causing disease. It was held that, without a doubt, insanity, epilepsy, gout, tuberculosis, syphilis, leprosy, carcinoma, and hysteria were inherited diseases, and for a long time physicians were satisfied with such an explanation. It is not necessary for us to quote authorities in support of this fact; literature is filled with the record of

these beliefs, and to a large extent the practice of to-day is still governed by them.

But a change is going on in our philosophy; and a most hopeful change it is. When LAMARCK stated that an organism was influenced by its environment and that it would transmit to its progeny the result of this influence, and that, imperceptibly, structure would become altered by the accumulation of changes handed down from individual to individual, this theory was adopted to explain the evolution of things. Then DARWIN advanced natural selection and the law of variation as being prominent factors in evolution, and made more use of, than the law of LAMARCK. Later specialists have shown that, if an organism is affected by its environment, it will take a long time before such change in structure becomes permanently fixed so that it is inheritable. In other words, the same conditions must act upon a vast number of generations before it can be transmissible. And now a German naturalist, WEISSMANN, holds that acquired characters are not inherited, at least not in such complex organisms as man and the higher animals. The Neo-Darwinians, as they are called, find sufficient cause in the fact of natural selection and in the mixture of germ-plasmas to account for such phenomena as were formerly explained by the theories of accumulated inheritance.

In medicine, however, the wildest ideas have been accepted as truths. Because father and son were affected with the same disease the disease was considered inherited. Even mutilations of newly born children were ascribed to prenatal causes affecting the mother.

What mother of a hare-lipped child has not traced this malformation to the sight (possibly in a confectioner’s shop) of a hare? What “strawberry-marked” child has not had a mother who, during the time she carried him, had a predilection for strawberries? While no sensible medical man holds such views to-day, yet others almost as unwarranted are entertained about the inheritance of diseases.

The germ-theory of disease has thrown down some of the bulwarks behind which we were wont to defend our ignorance. And though we at once put up another wall frailer than the former, and call it predisposition, we are obliged to look for other causes, and the burden of proof rests upon us.

Take, for instance, the question of tuberculosis. So widespread has this disease been that we doubt if any family can be said to be truly exempt; either through marriage or blood every one of us

¹ Illustrated by the noteworthy defence of *uranalysis*, by our excellent contemporary, the New York Medical Journal—a defence as regrettable as the thing defended.

must have some tuberculous taint within us, if this taint is inherited; and if this be true, how absurd to speak of inheritance or predisposition in one case and not in another.

Again, if diseases which are acquired during the life of an individual may be transmitted to future generations, immunity to disease ought likewise to be inherited. For hundreds of years the white race has been subject to such diseases as morbilli and scarlatina. Are our children less susceptible than we? Vaccination, which has been practised for many decades, unless performed on our children, leaves them as liable to contract smallpox as the barbarian's children.

But what about insanity and gout, surely these are inherited? We are glad to note that alienists are beginning to study their statistics with greater care. When an insane patient is admitted to an insane asylum the alienist is careful to inquire into the family history and to note every instance of mental derangement which occurred in the family. But what form of insanity, and when it happened, whether due to trauma or to acute disease—these things are not recorded. Even to-day some cases of insanity are not considered inheritable, and if a fracture of the skull causes epileptic insanity, though insanity be present in a near relation, such relationship cannot be said to influence the epilepsy. When DR. CHAPIN states that "insanity as a disease is not transmissible by inheritance, but may be acquired or evolved from a neurotic heredity as a basis," he is stating a principle that, sooner or later, must be generally recognized. "Knowledge, genius, and culture are not an inheritance, but depend rather on influence, education, and environment." Let us add vice and disease to this category, and we shall have to alter a great many of our medical notions, and we believe for the better. Can anyone doubt that the influence an hysterical mother exerts over her children from earliest infancy is sufficient to account for the neurotic dispositions often seen in such children? Children are most imitative. Not only do they copy the language of those with whom they are thrown in contact, but likewise the gait, gestures, expressions, and mannerisms. Place a child in charge of a melancholic nurse or in constant association with a hypochondriac, and unless such environment is counteracted by normal associations, may we not expect a neurotically disposed child? The contagiousness of mental diseases, of mental habits, is as yet too little

realized. We know that chorea is contagious. Why not some forms of insanity?

Physical characteristics which may be due to accidents prior to birth, such as deformities in the skull and corresponding changes in brain-structure, will often be the cause of mental disturbance; and when such characteristics depend upon similar characteristics in the parent they can be considered inherited; but here a peculiar physical character, as, for instance, a small pelvis, is the inheritable thing—inheritable just as a certain racial type of nose may be, though not absolutely so.

Again, in this great question of inheritance we do not consider the importance of the environment acting on the child as it acted or acts on the parent. In the matter of gout, for instance, why may not the same diet that produced podagra in the parent be the cause of podagra later on in the child? We are very likely to be fed as our parents were fed. Our mothers learn cooking from their mothers, and teach the same art to their daughters. The same kinds of food are used. Cooking being as yet largely empirical, cooks and families get into a routine practice; and if gout runs in families, is it not because the family bill-of-fare has been handed down as an inheritance, and the disease with it? Rheumatism, some think, is a germ-disease. If so, heredity is not needed to explain its origin in a given case any more than it is needed to explain the origin of leprosy. Syphilis cannot be considered an inherited disease. The fetus may contract syphilis *in utero*, just as it may become infected with smallpox or typhoid fever; at least there is sufficient doubt about the matter to refuse to consider this disease as an example of inheritance.

Thus the great bugbear of heredity sinks into comparative oblivion, from which we hope it will not be rescued. If we once put it away from us, we shall not rest until we have so changed conditions and altered the environment that the great preventable diseases will be driven out of existence. It is one thing to believe a disease preventable and another thing to act up to that belief. The profession is just beginning to preach prevention, and it should do so more earnestly in the future. To the parent it says: You have charge of your infants during the most important part of their lives; as you train them, so they will be physically and mentally. Do not trust to Nature; do not trust to Providence; but attend to it yourself, lest your children reproach you in your old age. To society the new profession

will say: The individuals of which you are composed are such as you deserve. If you allow unsanitary conditions to exist, you must reap the consequences in the shape of disease and vice. Do not expect healthy-thinking and healthy-acting men and women unless you provide a healthy environment. The forces of Nature are harnessed for our benefit. There is a vast deal more freedom in individuals and in the forces behind biologic evolution than we like to acknowledge. Disease and vice can be turned into beneficial channels, if we so will. The plagues no longer represent the anger of the gods, but we know them to be due to the negligence of men. In the end all men must die. We cannot absolutely save one single life; but whether one-thousand persons shall all live eighty years or one-half die before they are five years old depends largely, if not entirely, upon the action of society. When will we, as medical men, realize this!

EDITORIAL COMMENTS.

The "Diaductive Cure of Disease Through the Use of Pocket Oxydonor 'Victory,'" is the title of a pamphlet before us. From the description of the device we learn that "it consists of a piece of prepared metal, cylindrical in shape, about three inches long and one inch in diameter," with a cord or wire carrying a disc, to be fastened to the ankle or wrist. The "vocator," or other end of the instrument, is to be stuck in cold water. The absorption of oxygen is the object whereby every disease in the world, "except galloping consumption," is curable. "It is no kin in principles to medication or any of the electrical appliances," and is "yet unknown to established philosophy." "Not a day since September 15, 1854, *unless unconscious*," has the great discoverer ceased to devote his life to this great vest-pocket discovery. It is impossible to contract contagious diseases by means of the same instrument "during use," but when out of use "the elastic garter might." The discoverer, "Dr. Sanche, is the only source of artificially begotten spontaneous cure in every form," and it cost no less than \$200,000. "No worse advice could be had" than that of the family physician concerning "Victory" "until after the medical world has been fully educated to this new philosophy." "'Victory,' timely and rightly applied, makes a man practically independent of disease in any form by means of the irresistible forces of nature, which thus becomes a true panacea." The price of this bit of iron and string is \$25, and "the world has never been afforded such a profitable investment as the conversion of \$25 in an oxydonor."

Among the testimonials and recommendations of this brazen nonsense are the names of ten physicians. Three of these names are not given in Polk's *Register*, and three are in the *Register*, but are "starred" names—i. e., inquiry elicited no answers as to the little affair of the so-called doctors' graduation. Of the four remaining names, three

are Hahnemannians, and one of these is the most enthusiastic "boomer" of all the recommenders—Dr. William Nephew King, of 214 West Forty-fourth Street, New York, who, we judge, has discarded all other therapeutic agents, treating vest-pocketally and oxydonically, but not sardonically, "almost every form of disease incident to this climate in this city for about three years." Typhoid fever he arrests in from seven to nine hours, completing the cure in from one to four days. Every form of insanity Dr. King knocks out at once with his miniature diaductive machine and its little "vocator." Of our ten physicians there remains one, Dr. J. W. Janes, of Atlanta, Ga., whom Polk classes as a "regular." We congratulate the regulars!

But our ten physicians of the body are matched by exactly the same number of physicians of the soul, who vie with each other in sonorous phrase and praise of the "Diaductive Cure." One of these, a Doctor-of-Divinity man, Rev. George D. Watson, is most marvellously cautious, because, although oxydonor cured his family's rheumatism, bad colds, etc., still "we found that our daughter Lulu needed special surgical treatment, and sent her to Gainesville some weeks ago." He signs himself, "Yours in Jesus," whilst Rev. J. F. Grob prefers the variation, "Your brother in Christ." These brethren are so proud of their new gospel that we would not seem invidious, and therefore we name them all: Rev. George D. Watson, D.D., Windsor, Fla.; Rev. Noble Frame, 706 Snyder Avenue, Philadelphia; Rev. J. F. Grob, 13 East Mount Pleasant Avenue, Germantown, Philadelphia; Rev. A. L. Kilburn, 607 West Lexington Street, Baltimore, Md.; Rev. Joseph Gaskill, 218 Perry Street, Trenton, N. J.; Rev. Z. R. Ward, Parker, South Dakota; Rev. C. M. Sessions, Mount Vernon, Iowa; Rev. J. I. Corbyn, Anamosa, Iowa; Rev. S. H. Reisner, Lebanon, Pa.; Rev. Henry L. Phillips, 707 Florida Street, Philadelphia.

A *Hahnemannian Hospital for the Insane* is desired by 20,000 persons of Pennsylvania, who have petitioned the Legislature, we presume, to give them both the money and patients necessary to carrying out the scheme. As the *Telegraph*, of Philadelphia, says: "This is a testimonial that cannot be ignored. It is the duty of the State to recognize public requests of this sort, and it is to be hoped the movement in favor of the Hahnemann Asylum will be favorably regarded. Pennsylvania should not be a laggard in matters of this kind." The query arises as to what is the exact nature of the therapeutics of insanity according to homeopathic principles. If, according to the etymologic and popular idea of the origin of lunacy the affection is due to the influence of the moon, then the rational treatment would, of course, be moonshine in high potencies. Swan, the New York homeopathic druggist, advertises moonshine for sale, all bottled and corked, ready for use, and, in all seriousness, we suppose it must be prepared for lunatics. For whom else, pray? But a further doubt arises as to the effect of dilution, "dynamization," or "potentization" upon moonshine. Does it make it darker or lighter, less moonshiny or more moonshiny? If, according to the theory, more intense, then moonshine dynamized the number of times required in the thirtieth potency would make it more powerful than light at the sun's surface,

more powerful even than electricity of the greatest possible potential. As this would positively kill our poor lunatics in a jiffy, our legislators should couple their grant with the proviso that moonshine should not be administered in higher potencies than the second or third.

Moreover, if, as the wonderful *Telegraph* asserts, every medical sect which can get signatures to petitions to the Legislature to secure public plunder and patients (should therefore have said plunder and said patients), we respectfully appeal to the legislative sense of justice in favor of others. It would certainly be possible for the Keeleyites to get 20,000 signatures in reference to the cure of drunkards, morphinomaniacs, etc. Just as surely are there 20,000 people in Pennsylvania who believe in faith-cure as the sole treatment of disease. The *Literary Digest* and Funk & Wagnalls could probably secure 20,000 signers as to the merits of "Electropoise," and Dr. Sanche would soon produce signatures *ad lib.* of D.Ds., Reverends, and voters galore for the Diaductive Oxydonor Victory. From Dr. Slee's neighborhood the Pow-wow people should also have representation. There is at Atchison, Kansas, an "Electro-Hydro-Messopathic and American Health Institute" that "opens the doors to health." It is conducted by "S. Murphy, M.D.," the learned man spelling does, consummate, candor, please, type, venous, strict, endeavor, etc., dose, consimulate, kandor, pleas, tipe, venus, strick, endeavor, etc. Should such institutes and their friends not also be permitted to petition? And should not their prayers be heard and granted? Remarkably wise guide in medical and sociologic matters is the *Telegraph*—most uncommon wise!

"*Doctor of Pharmacy.*"—Such is the title that the Philadelphia College of Pharmacy and the New York College of Pharmacy propose giving to those of their students who pursue post-graduate courses or whom they deem especially worthy of honor. The title, Doctor, is already quite sufficiently non-distinctive, and this last attempt will, if carried out, make it utterly valueless. We cannot understand this strange and morbid desire on the part of our pharmaceutical friends. Is it an attempt to get ahead of rival colleges of pharmacy who have not adopted the more extended course of study, and whom they hope to outstrip in offering high-sounding but empty titles as rewards for matriculants? If the aim were to elevate pharmaceutical scholarship, why not raise the standard of entrance-examination instead? That excellent journal, the *Pharmaceutische Rundschau*, in its April issue gives a history of the movement and epitomizes the unanswerable arguments against it. The heads of many of our chief universities are also united in the opposition.

The title of Doctor in our country, with the exception of the few instances of high scholarship in science or philosophy, has been almost wholly confined to members of the medical profession, and thus limited it has some significance and propriety. But if two schools of pharmacy give it to their graduates, all others must follow suit, and then the man who treats disease and the one who fills prescriptions will come to occupy the same position in the eyes of the community, and will be designated in the same way. The Doctors of Divinity have largely gone into the patent-medicine business in opposi-

tion to physicians; and if now every druggist also turns doctor, what in the world may medical men do and what may they be called? For twenty-five years at least the best men of the pharmaceutical profession have opposed, and until now they have successfully opposed, this vicious craze of the schools of pharmacy for plebifying the doctorate degree. If carried out now, the druggists will only make themselves objects of scornful mirth, and the degree itself, shortened to "Doc," will soon become the butt of ridicule and the familiar appellation of chiropodists, masseurs, and venders of nostrums. Certainly no sensible druggist who has any self-respect or who values the respect of the medical profession or of the public, would take to himself the empty honor of a title without acquiring the peculiar knowledge which for centuries has alone given the right to its use. The whole movement is amazingly silly, but it is also far worse than silly. Self-respecting pharmacists should oppose it with unwearying determination.

Progress in Chemistry is at present remarkably rapid and brilliant. The noteworthy discovery of argon, the new element, has been followed by its liquefaction, and now one of the discoverers of argon, PROFESSOR RAMSEY, announces that in experimenting with argon he has discovered still another new element, helium, the lightest of all the elements. It fills a gap demanded by chemic theory, and PROFESSOR CROOKES has demonstrated that it is to be attributed to line D₃ of the solar spectrum, at wave-length 587.47 micromillimeters. This line had been attributed to some unknown element which, though undiscovered, had been called helium. This is a brilliant vindication of theoretic chemistry, and PROFESSOR RAMSEY gains a richly deserved honor.

At the same time comes the most interesting announcement of the liquefaction of the last of the gases, hydrogen (the last, prior to the discovery of helium), under great pressure and intense cold. This has been accomplished by PROFESSOR OLSZEWSKI, of Cracow, who also liquefied argon. The "critical point" of hydrogen (*i. e.*, the temperature at which it passes from the condition of a liquid to that of vapor) is -233°C ., and its boiling-point at normal pressure is -243°C .

Hydriatrics in Hospitals for the Insane.—We had occasion in THE MEDICAL NEWS of March 30th to call attention to the creditable showing made by the figures of the Pennsylvania Hospital for the Insane in tables giving the mortality from tuberculosis in a number of hospitals for the insane in the State of Pennsylvania. The explanation of this exhibit must be looked for in the general management and hygiene of the patients, as well as in special methods of treatment. Most will be accomplished in the treatment of the insane where it is recognized that a diseased condition is to be corrected, and the means to this end must include the widest range of hygienic as well as medicinal measures. Recognizing the utility of water properly applied in the treatment of mental disease, the Managers of the Pennsylvania Hospital have approved plans for the construction of a swimming-pool and Russian bath on the grounds of its department for the insane. Provision is to be made for various forms of douches, massage, and the like. In taking this step the Pennsylvania Hospital gives evi-

dence of wise and progressive management, and the new feature should prove a powerful means of favorably influencing not only the special but also the general results of treatment.

The Society of Medical Phonographers, to which reference was made in *THE MEDICAL NEWS* of March 9th, p. 274, now numbers, we are informed, 128 members, and new members continue to join. The promoters of the Society are anxious to have members in America. The publications of the Society can be obtained from the New York house of Isaac Pitman & Sons. Those members of the profession who use the slightly different Benn Pitman system will find little difficulty in reading that which is now used in Great Britain by 95 per cent. of shorthand-writers, and has been almost unchanged for thirty years. A strong desire is felt by the Society to promote the use of shorthand among the members of the profession in the United States as well as in Great Britain, and the Honorary Secretary, Dr. James Neil, Warneford Asylum, Oxford, England, is particularly anxious to hear from medical phonographers who are impressed with the importance of the movement, and, from a desire to improve the objects of the Society, would be willing to act as local agents for it in the United States.

Neither Generous nor Just.—Our esteemed contemporary, the *Medical Record*, of March 23, 1895, p. 371, contains a column-long excerpt from the editorial pages of *THE MEDICAL NEWS* of March 16th without any credit to us, and without quotation marks. In the same issue (p. 372) there are eighteen more lines, also not credited. Still other instances of the same kind we will not mention, and even these would have been "forgiven and forgotten" had not a justly indignant contributor to our columns called our attention to a more regrettable omission in the editorial of the *Medical Record* of March 30, 1895, p. 403, on "Cardiocentesis and Cardiac Surgery." In *THE MEDICAL NEWS* of October 27, 1894, DR. JAMES R. CHURCH published a noteworthy memorandum concerning "A Case of Gunshot Wound of the Heart." In the *Record* editorial neither Dr. Church nor his article is mentioned, but eighteen lines from it are quoted verbatim, again without the borrower's marks and without mention of *THE MEDICAL NEWS*.

A Sharp Practice as Regards the "Reading-notice," whereby many a too-innocent medical editor has been hoodwinked, is for the wily advertiser to do something very doubtful or criticisable, and then secure the reading columns of the journal to explain matters and to set himself right. Every honest editor wishes to be just and even charitable to all, and not least to the advertiser, and the plea is a powerful one that it is unjust not to "hear the other side," not fair not to give every one an opportunity to be heard in his own defence. But we think the scheme has been about "worked out." Every charlatan has made use of it, and the suspicion will in future arise that when such "fair play" is permitted there must be a clear *quid pro quo* at the bottom of the transaction. Most men, perhaps, would prefer that this suspicion should rest upon them rather than that of the most glaring gullibility. Why not avoid both?

CORRESPONDENCE.

THE DISCUSSION BY THE NEW YORK ACADEMY OF MEDICINE CONCERNING THE TREATMENT OF DIPHTHERIA WITH THE ANTITOXIN.

To the Editor of *THE MEDICAL NEWS*,

SIR: The meeting of the New York Academy of Medicine for April 3d was arranged to be a symposium on the antitoxin-treatment of diphtheria, and a number of those who had had special opportunities to study this subject practically were invited to participate in the proceedings. DR. HERMANN M. BIGGS opened the discussion by a historic and statistical report. The cases were divided into two classes, viz.: (1) those treated in the Willard Parker Hospital, and (2) those treated in the tenement-houses by the physicians attached to the Board of Health. In the latter class were 255 cases, with 40 deaths, or a mortality of 15.69 per cent. Fifteen of these deaths occurred within twelve hours after the injection of the antitoxin. If these were excluded, the mortality would be 10.4 per cent. Out of 107 cases in which the antitoxin-treatment was begun before the fifth day of the disease the mortality was only 7.79 per cent., and all the evidence seems to point to the fact that but little benefit can be expected from the treatment unless it is begun at an earlier stage than this. The series of hospital cases did not make such a good showing, probably owing to the fact that this list comprised many severe cases, and they did not come under observation until later on in the disease. Out of the 129 cases in this class there were 31 deaths, or a little more than 24 per cent. Comparing these figures with those obtained from the cases treated in this hospital in the same season of 1894, we find that at that time 146 cases of diphtheria were treated without the antitoxin, with a mortality of 32 per cent. Dr. Biggs said that in his experience the effect of the antitoxin on the membrane had always been quite marked, even when there had been but little improvement in the general condition. In a little more than 6 per cent. of the hospital cases eruptions, for the most part resembling urticaria, were observed, and albuminuria was observed in about the same proportion of cases. In most instances the serum employed was that manufactured under the auspices of the Board of Health. One case had a very troublesome urticaria, followed by swelling and pain in the larger joints and by loss of power in many of the muscles. In concluding his remarks the speaker said that it should not be forgotten that diphtheria-antitoxin is a specific only against diphtheria-toxemia; it does not restore renal cells or heart-fibers already degenerated, or relieve laryngeal stenosis. The earlier the antitoxin is administered, the more striking its effect. The mortality among cases throughout the city that were not treated with antitoxin was between 25 and 35 per cent. at the same time that the cases treated with the antitoxin yielded a mortality-rate of only 8 to 10 per cent. This in itself was a sufficient comment on the value of the new treatment.

DR. C. H. PECK then described the success that had attended the use of the antitoxin in controlling a very extensive and stubborn epidemic of diphtheria in the New York Infant Asylum. The temporary immunity con-

ferred in this way proved far more effectual than all the previous attempts that had been made to stay the disease by isolation.

DR. GEORGE P. BIGGS, after making eighteen autopsies on patients who had died after the antitoxin-treatment, said that he had come to the conclusion that the antitoxin had a distinct influence in loosening the diphtheric membrane, and that it also tended to check decidedly parenchymatous degenerations of the internal organs.

After the reading of papers the general discussion of the subject was opened by DR. JOSEPH E. WINTERS. He denounced the new treatment most vigorously, and stated that careful daily observations in the Willard Parker Hospital during the past three months had not only forced him to take this stand, but had taught him to consider the statistics presented in the paper by Dr. Biggs as wholly unreliable and misleading. To support this strong assertion he cited a number of cases appearing in the statistics as having been successfully treated with the antitoxin, and narrated how he had been unable to find any *clinical* evidence of diphtheria in some, and only the mildest manifestations of the disease in others, although doubtless all of them had given the bacteriologic diagnosis of diphtheria. Passing over some of the minor points made in his sweeping criticism and denunciation of the work done in this hospital by the advocates of the antitoxin-treatment, attention should be called to the fact that Dr. Winters claims that the temperature-charts and many of the symptoms presented by not a few of the cases treated by the new method were strongly indicative of the existence of septicemia, and that the treatment resulted in establishing a condition of profound anemia. In his opinion the element of individual susceptibility would explain the disastrous results observed, including the fatal case very recently reported in Brooklyn. In conclusion, he said: "I oppose the antitoxin-treatment because in 150 cases treated in the Willard Parker Hospital there is not the slightest evidence that a single symptom has been relieved, and because it is dangerous in its immediate effects on the kidneys and nerve-centers, and in its remote effects on the blood."

DR. GEORGE L. PEABODY detailed his experience, showing that a bacteriologic diagnosis *alone* was very often far from satisfactory, and that something else besides the Loeffler bacillus was necessary for the development of the disease. His own experience with the antitoxin-treatment had been quite encouraging, and he thought that the bad results that had been observed by Dr. Winters might possibly be explained on the ground that they were cases of mixed infection, over which, it is well known, the diphtheria-antitoxin was powerless.

DR. L. EMMETT HOLT expressed his confidence in the antitoxin-treatment, and expressed very similar views regarding the shortcomings of the bacteriologic test. A complete diagnosis of diphtheria should be founded on both clinical and bacteriologic grounds.

DR. W. L. SOMERSET, of the Willard Parker Hospital, showed from the records of that hospital that there had been a distinct lowering of the mortality-rate by the new treatment.

DR. HERMANN M. BIGGS, in closing the discussion, said that Dr. Winters had shown himself in many ways to be biased in his views on this subject, and perhaps in none

more than in his allegation that there had been but little severe diphtheria in the city. It was not claimed that diphtheria-antitoxin would neutralize sepsis or anything but diphtheria-toxemia. So far as he knew, no case had been included in his statistics in which there had not been a clinical as well as a bacteriologic diagnosis of diphtheria made before beginning the treatment. The fact that there had been a sudden and marked lowering of the mortality in diphtheria all over the world since the adoption of the antitoxin-treatment was a sufficient refutation of the charge that it was wholly valueless.

NEWS ITEMS.

Pathologic and Anatomic Associations in New Jersey.—

The Legislature of New Jersey has passed and the Governor has signed an act providing that any three or more physicians duly authorized and licensed to practise medicine under the laws of the State of New Jersey may associate themselves together for the purpose of pathologic and anatomic study and the advancement of medical and surgical science.

All public officers, agents and servants, and all officers, agents and servants of any county or of any city, township, borough, district, and other municipality, and of any and every almshouse, prison, morgue, hospital, or other public institution in such county, having charge or control over dead human bodies required to be buried at the public expense, are required to notify the president or other head officer of any such association or such person or persons as may, from time to time, be designated by said association as its duly authorized officer or agent, whenever any such body or bodies come to his or their possession or control; and shall, if such association or its duly authorized officer or agent request it, without fee or reward, deliver such body or bodies, and permit such association and its duly authorized officers or agents, who may comply with the provisions of this act, to take and remove all such bodies to be used within the State for the advancement of medical and surgical science; but no such notice need be given, nor shall any such body be delivered, if any person claiming to be, and satisfying the authorities in charge of said body that he or she is of kindred or is related by marriage to the deceased, shall claim the said body for burial, but it shall surrendered for interment; nor shall notice be given or body delivered, if such deceased person was a traveller who died suddenly, in which case the said body shall be buried.

Whenever more than one association shall be organized within the same county it shall become the duty of the board of governors or directors of each association to appoint two of their own number, who together shall constitute a board of distribution of dead human bodies, whose duty it shall be to distribute the bodies which may from time to time be so delivered to it under the provisions of this act equally and in just rotation among the different associations organized under this act.

Dr. S. C. Bussey, of Washington, D. C., fell down the elevator-shaft in an apartment-house on April 5th, and suffered serious injuries.